

SO_3170 US

<110> Bunch, Roderick T.
Morris, Dale L.
Curtiss, Sandra W.
Rodi, Charles P.

<120> BIOMARKERS AND ASSAYS FOR CARCINOGENESIS

<130> 3170/00/PCT

<140> US/09/490,609

<141> 2000-01-25

<150> US 60/118 078

<151> 1999-01-29

<160> 580

<210> 1

<211> 271

<212> DNA

<213> Rattus norvegicus

<400> 1

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gaaacaaaaa tttttttgta atcatcaaatt ttatactagc tatctgggtg ttagcatatc 180
tagtaattat gagtctagaa taattttttac atattttttat attattgtcc tctcagttac 240
tgaatggatg gaaaacaatc atgttggttt a 271

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<211> 206

<212> DNA

<213> Rattus norvegicus

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gactgtgggtt ttctggacgt gttgtgtctg ttagtgtctt tttgactttt gtttcgtggt 180
tgaatttgga ctgacgactg tgttta 206

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<211> 74

<212> DNA

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<213> Rattus norvegicus

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cctgtttttg tttta 74

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<211> 207

<212> DNA

<213> Rattus norvegicus

<400> 4

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gatagccctg cctcagctg tgggaacaca gtggtcgtca agccagcaga gcaaactcct 180

ctcactgctc ttcacatggc atcttta 207

<210> 5

<211> 147

<212> DNA

<213> Rattus norvegicus

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<210> 6

<211> 366

<212> DNA

<213> Rattus norvegicus

<223> unsure at all n locations

<400> 6

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gaattcctcn agacggtcct gtggcngcta caccngggaa ctagaccatc gaaccttgca 120

aagaacacta ttcttgtaa atggetaccc caaaacgac tgcttggtca tccaaaggct 180

cgggcgttca tcacacactc ccggttccca tgggtatttat gaaggaatat gcaatgggggt 240

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tcccaatggt gatgatgccc ttgtttggtg atcagatgga caacgccaag cgcattgaaa 300
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 ccctta 366

<210> 7
 <211> 156
 <212> DNA
 <213> Rattus norvegicus
 <223> unsure at all n locations
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 caaggaggtg actggacaaa ctagcatgtg gcctta 156

<210> 8
 <211> 103
 <212> DNA
 <213> Rattus norvegicus
 <400> 8

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<210> 9
 <211> 127
 <212> DNA
 <213> Rattus norvegicus
 <223> unsure at all n locations
 <400> 9

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 gggatta 127

<210> 10
 <211> 400
 <212> DNA
 <213> Rattus norvegicus

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<223> unsure at all n locations
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tacttctgca aaaccaactg tgtgcttttt gaaggagaga ctccagatga aacagttatc 180
acttctcacc actatgtcaa acagagtctg ctcaaatat gctgcatatg gaaaggaaaa 240
atcaaggatg agccatctca taaaactagc ccaaaaagta ccaactgcta acctggagga 300
tggtctgcca ctgctgaag accttactga aatcctgtcc agatgttgta agtctacctc 360
agaagactgc atggccagag agctgcctga acacacatta 400

<210> 11
<211> 57
<212> DNA
<213> Rattus norvegicus

<400> 11

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<210> 12
<211> 231
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 12

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tgctccagtg ggattgcaca agaatgtctg tgcagaagca aagacagcct ttttaccagt 180
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<210> 13
<211> 295
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 13

SO_3170 US

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 ctaaataaggc caccaagtga cagcaaaatg gtgccaaagn tctactacag cactgctaag 180
 aaccgacagc tgagaagccg gatagcttct gacctagagt gcacacacct aagtcctcaa 240
 ctggaccttg alayccaaca aatgggagca gtgtcttctc tctttagcac ctta 295

<210> 14
 <211> 188
 <212> DNA
 <213> Rattus norvegicus

<400> 14

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 ctgtacgatt gcctgaagga gaagcactgc agtgtttgac agagcgtgct atgagttggc 120
 aagatagagc acgacaagct ttagccacag atgaactgtc ttctgccttg gccaaactct 180
 ctgtgtta 188

<210> 15
 <211> 194
 <212> DNA
 <213> Rattus norvegicus

<400> 15

gatccccttt ccagtgata ccagatttg atttgattgc ccgttttggt ccattgttgg 60
 ataggttgga atggtgagca atatcagaga accatgtttt ctctcaggac actttctgtg 120
 ctggggtagc acaggctgtc atgctcagca taggtgctcg ctctgtaca ctagtccttc 180
 aaagtcgtgg ctta 194

<210> 16
 <211> 164
 <212> DNA
 <213> Rattus norvegicus

<223> unsure at all n locations
 <400> 16

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 gtttggtggt atcattccaa cgatgatggg aaatctactc tctgaaggca gaatgaatga 120

gaaaatggcc agttctttct tgaagagggt cagccctaac ctta 164

<210> 17
 <211> 43
 <212> DNA
 <213> Rattus norvegicus
 <223> unsure at all n locations
 <400> 17

gatccctgag atgccctaga tcaatgncat gactatgaca tta 43

<210> 18
 <211> 426
 <212> DNA
 <213> Rattus norvegicus
 <400> 18

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 gaagaccata ggctgacac aggatgtcag tcaatgtcac agaatggatt tgaacactct 180
 gtagtggact gtgtacggct aaacacaggg actcttctac aaccagggaa tgctggagct 240
 gttctctgtg aaggccacac cctgagtgt ccagtccttc cctgggctcc tcatatgaga 300
 gctaggcatt gtctgatgtg gtgacctgc agggacagcc ctttgttctt gacagccaca 360
 gccttcagtg agcctggatt tctgtgtgc tttcctagga agttctccct ggatgactgc 420
 tgggta 426

<210> 19
 <211> 212
 <212> DNA
 <213> Rattus norvegicus
 <400> 19

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 cagtaagaac acggccagca tttcagagtt gctggacggg ggtctctacc ctgggagctc 120
 gctaagtgat ttcgactact gggattatgt cgtccccgag cccaacctca acgaggtggg 180
 gtttgaagag acaacatgcc agaatttggt ta 212

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<210> 20
 <211> 215
 <212> DNA
 <213> Rattus norvegicus

<400> 20

gatccgagag taggtccacc ctgctggctc tgtgaactggc gggcttggat ttataacagg 60
 agaaaaaggc ggcggctgat cttctaggct gcaaacgggt gtctctggcc atccctggat 120
 actggctgga gaggagacag cgtcttcaca gttgtacttg tagccttcac aggtcaggct 180
 gcgtctgccc actcctgtcc attgtacgtg cgtta 215

<210> 21
 <211> 286
 <212> DNA
 <213> Rattus norvegicus

<400> 21

gatacctaaag gcggtcacat ggttcctgct gaccaaggga catggctctg aagatgatga 60
 ggctgggttac tcagcaggag tagctgagct gagctggccc tggaggcctg gagcctggag 120
 gccctggagt agggcccagg atgcagggtgc taatgtctat ccccggcgt cttcttcccg 180
 actctaccat gggatgtaac tccaggaccc ctgccatctc cggtaccaa agactgtggc 240
 ttccgtgtct actcagaaat cagttctact tcgtaaacag tgttta 286

<210> 22
 <211> 227
 <212> DNA
 <213> Rattus norvegicus

<223> unsure at all n locations
 <400> 22

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 atgctgtgat ctctgaaggg acaactctaa aatcaaagtg ctggaagggt ggctccatcc 120
 tgagntnctc ttgcattgc aagtgttggtg tttgtcctgt gccttatgct cttctctcat 180
 acctgcaaag gatgcatgta tacttgcttc tcaactcttc ctgttta 227

<210> 23
 <211> 51

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<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 23

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<210> 24
<211> 83
<212> DNA
<213> Rattus norvegicus

<400> 24

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tctagaagac agtcagtgcc tta 83

<210> 25
<211> 322
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 25

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gcaactgcat tcatgggcta tgtactccca tgaggacaaa tatcattctg aggagctaca 120

gtaattacaa acctattatc agctatccct tacattggga ctaccctagt cgaatgaatc 180

tgaggaggct tctcagtaga caaagcaacc ctaacacgct tcttcgcatt ccacttcac 240

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tcaaataacc ccacanggat ta 322

<210> 26
<211> 178
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 26

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tcagtttctt gcaaagccgt tgagagagtc acagaccacc tcttacgga tctcagacct 120

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ggacagagaa cagttcaaac tcngggagat gcaaagccgg tatgagcaac ctgcatta 178

<210> 27
 <211> 275
 <212> DNA
 <213> Rattus norvegicus

<400> 27

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 atgctgtctg ccatttgtct ttctgtcagt cactcttgct cccactccat ctgctcacat 120
 ctcattcttt cttctcacct tgttcacctc caccacctt ctgctgtgct tctggctctc 180
 ttgtctgtca gtctttctat ctgcactctt ggaatttcta cctgcttttc tctctacctg 240
 gccctacct gacttcattg ttgaccttga cctta 275

<210> 28
 <211> 69
 <212> DNA
 <213> Rattus norvegicus

<400> 28

gatctcaatt tgatgtcatt ctgcagatg ctgtgggtcc ctgtgggtgag ctgctagcta 60
 gaatgctta 69

<210> 29
 <211> 48
 <212> DNA
 <213> Rattus norvegicus

<400> 29

gatctctcta tagaccagaa acatgatatg tggaccatgc tggcctta 48

<210> 30
 <211> 308
 <212> DNA
 <213> Rattus norvegicus

<223> unsure at all n locations
 <400> 30

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 ccttcccact gtgcattaca acatgggcgg gnntcccact aactacaagg gacaggtgct 120

SO_3170 US

gaagcacgtg aacggccagg atcagattgt gcctggtctg tacgcctgtg gggaggctgc 180
 ctgcgcctca gtgcatgggtg ccaaccggct tggagcaaac tctcttttgg accttgtcgt 240
 ctttggccga gcctgtgccc tgagcattgc agaattctgc aggccctggag ataaagtccc 300
 tccgatta 308

<210> 31
 <211> 221
 <212> DNA
 <213> Rattus norvegicus
 <223> unsure at all n locations
 <400> 31

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 ttctgtcctg tggatttcaa aacaaacttt ccttctgcag tgtgcacttg ggggcgggtc 180
 ttggnntant gaggagacag cctgtcagcc tctgcccatt a 221

<210> 32
 <211> 186
 <212> DNA
 <213> Rattus norvegicus
 <400> 32

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 aactctgcct acaggggtgct tgcttattga tagtgaatta tcatttcttg tgggtgtcttc 120
 atccatgtct ataactttct tagaacatca tgaaatgggt actttactac atgatttata 180
 acatta 186

<210> 33
 <211> 146
 <212> DNA
 <213> Rattus norvegicus
 <400> 33

gatctcatcc tcccgaagg gttgctaggg ttctgtgtgg aaactgtggc gtcagcagcc 60
 agagcacatg ctcttgccc agggctctca ggctcactct cactcatgt attttgtctc 120
 tgctcgtagg aaaatcatcg tcatta 146

<210> 34
 <211> 125
 <212> DNA
 <213> Rattus norvegicus

<400> 34

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 agtttttgat gccctgggtca gtcttgtaat ggaacttgca gtacactgcc tctccattcg 120
 catta 125

<210> 35
 <211> 49
 <212> DNA
 <213> Rattus norvegicus

<223> unsure at all n locations
 <400> 35

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<210> 36
 <211> 193
 <212> DNA
 <213> Rattus norvegicus

<400> 36

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 ttcatgggcc acggaacgac tacaaatagt ggcgagatgc tgccctctgg tggcccga 120
 cggtgaactc ggttgatatag gtggattgat tacaacagtc aactcccagg gtctgacttt 180
 ctaatccgcg tta 193

<210> 37
 <211> 205
 <212> DNA
 <213> Rattus norvegicus

<223> unsure at all n locations
 <400> 37

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 agggacaata tcattgacct aaccaagact gatcgctgtc tccaggcccg aggttgaaga 120

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aaggcctgag cctccagatt gcagggcaag atccagtgag agcaagantg cttctctgtc 180
cagaagtcaa tccaagaagt gctta 205

<210> 38
<211> 177
<212> DNA
<213> Rattus norvegicus

<400> 38
gatctgagtt cagacatcaa ggaaaagttt gcaaaactat gtgtggcaca tggaattcac 60
tagggacaat atcattgacc taaccaagac tgatcgctgt ctccaggccc gaggttgaag 120
aaaggcctga gcctccagag tgccctctctg tccagaagtc aatccaagaa gtgctta 177

<210> 39
<211> 157
<212> DNA
<213> Rattus norvegicus

<400> 39
gatctggtea tgttgctggt gctcactctc acctgtctta ttctctgtc aatctggaga 60
cagagttctg ggagaggaaa gctccccag gcctattcct ctccaatta ttggcaatat 120
ctttcagcta aatgtgaaga acatcaccca atcctta 157

<210> 40
<211> 413
<212> DNA
<213> Rattus norvegicus

<400> 40
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aggcttcac tgggcctgta agaactatga tggatgatgtg cagtcagact cagtagccca 120
aggttatggc tcccttggca tgatgaccag tgtgctgatt tgtccagatg gtaagacggc 180
agaagcagag gctgccccatg gcactgtcac acgtcactac cgcattgtacc agaaaggaca 240
ggagacgtcc accaatccca ttgcttccat ttttgcttgg tcccgagggt tagccccag 300
agcaaagctt gacaacaata ctgagctcag cttcttttga aatgctttgg aagaagtctg 360
cattgagacc attgaggctg gctttatgac taaggacttg gctgcttgca tta 413

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<210> 41
 <211> 346
 <212> DNA
 <213> Rattus norvegicus

<400> 41

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 tccttacccct cttgcctcta tagagaaagt gctgggattg caggcagatg acacacctgt 120
 ccaacaactg gttcataaag gcagatgcag ggtacttcac acacactggg ctgggcagct 180
 gggactgcca gggagagggt cttagcatatc atgaaagtgg acagggacag ctctgggggt 240
 taggcaggaa tagacaaagg tgacaagcct caccgacctc gggacaggag tcctgtgag 300
 ggccttgctt acctcctgta tctccctctt cccctgtcag ccatta 346

<210> 42
 <211> 292
 <212> DNA
 <213> Rattus norvegicus

<400> 42

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 cggaggggaat ggtatcaagc tcatcatgga gtttctgcct tcgggaagcc taaaggaata 120
 tctgcaaaag aataagaaca aaatcaacct caaacagcag ctaaaatatg ccattccagat 180
 ttgtaagggg atggactatc tgggctctcg gcaatatgtt caccgggact tagcagcaag 240
 aaatgtcctt gttgagagtg aacaccaagt gaagatcgga gactttgggt ta 292

<210> 43
 <211> 239
 <212> DNA
 <213> Rattus norvegicus

<400> 43

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 acagetaacc aagtattcac gtaccctgta ttctgtgggt tagctaagct cctttgagca 120
 gctctactag tgtggcctgg tctgtctcat gagcccagtc acttctcact tcagctgggg 180
 ctgggttaggc tggggtcacc cagccattgt agcaagtgtt ggttgcacg gcttgggtta 239

SO_3170 US

<210> 44
 <211> 121
 <212> DNA
 <213> Rattus norvegicus

<223> unsure at all n locations
 <400> 44

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 ctttttgccg cgttcttcct tcaattggca gaagaagtgt gccagcacat cccctacgtt 120
 a 121

<210> 45
 <211> 117
 <212> DNA
 <213> Rattus norvegicus

<223> unsure at all n locations
 <400> 45

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 caggccagtg ccattattta ggcttgcagt ggcgggatta cttcaagcag tggatta 117

<210> 46
 <211> 105
 <212> DNA
 <213> Rattus norvegicus

<223> unsure at all n locations
 <400> 46

gatccagttc caggatgtgt gtccttgatc cttctctctt gctgctggc actgacnagt 60
 gcccatgaca agccttcctt tcaccactgt cggacgacat gatta 105

<210> 47
 <211> 52
 <212> DNA
 <213> Rattus norvegicus

<223> unsure at all n locations
 <400> 47

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<210> 48
 <211> 442
 <212> DNA
 <213> Rattus norvegicus

<400> 48

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 gtcattcacca tcgctcacag gctgcacacc atcatggaca gtgacaagat aatgggtccta 120
 gacaacggga agattgtcga gtatggcagt cctgaagaac tgctgtccaa cagagggttcc 180
 ttctatctga tggccaagga agccggcatt gaaaatgtga atcacacaga agctctagca 240
 gctgggttccg tggctggcgg gactataaga acagtttcta ttatttgctt tgggtttctg 300
 tgactgtgct ctaggtgcaa agacacatat tttgttcccg ttgctcaggc tgggcctcaa 360
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 gattatcatg aataaatatt ta 442

<210> 49
 <211> 227
 <212> DNA
 <213> Rattus norvegicus

<223> unsure at all n locations
 <400> 49

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 gagtgtggcc cgccgggtcc tccaagccct ggangggctg aaaatggtgg aaaaggacca 120
 agatggggcc gcaagctaac acctcaggga cagagagatc tggacaggat cgccggacag 180
 gtggcatgct gccacaaga agcattagaa caaaggatgc tgggtta 227

<210> 50
 <211> 248
 <212> DNA
 <213> Rattus norvegicus

<223> unsure at all n locations
 <400> 50

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 acggacacaa gaggaatatc ccctggaagt gaaccaagtg gaaagaatga gctgtgagac 120
 tggatagtta tgggtgcctca agctgaccc tctgagtggg cggggctagc accccagtgt 180

SO_3170 US

ccatcaagca aggtctatcc ttctgagtgg gcaggctagc actccagtgt ccagnnattc 240
cagtctta 248

<210> 51
<211> 113
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 51

gatccaactt nncagnnaan tgggagctan ctatctggaa tccacagctt gatgatttnt 60
acatcggaata gtactttggg aggntgttgg agtatcttnt gattcaagcc tta 113

<210> 52
<211> 198
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 52

gatccctaca agagggnagac aanacttcaa catagtgtgt gagctattct cttcggtccg 60
atcatacctt gtagtttgag cctctacct tgagaaatcc agatggatga agaaaagata 120
gctaacagct accagagggt gcatttggat gaaggaataa catctaattgt tntacaggat 180
aacnntaact gacaatta 198

<210> 53
<211> 166
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 53

gatcccatcg ctcangcngc anntcagggt cantcctgga gagagatccc aaaattcttc 60
aggcaacacc tccttcagtc tggagnnaac tctaaatagt gtgaccatgt aggacagagt 120
aaagggcagg gagtgaatta gagaagagtt ggnngtctgg ggatta 166

<210> 54
<211> 190
<212> DNA

SO_3170 US

<213> Rattus norvegicus

<223> unsure at all n locations

<400> 54

gatccgagga catnctnctg gattcacaac tcttcaacct caggacggcg acgtcgctca 60

atgggggattg gtttttcgat tgctgtggcc tctgacaaaa gagaaaagat agaagagaac 120

ggcagcatga gagtttttgt gcagcacatc gatgtcttgg agaattcctt aggcctncnag 180

ttccgtatta 190

<210> 55

<211> 178

<212> DNA

<213> Rattus norvegicus

<223> unsure at all n locations

<400> 55

gatacctagtt caggggnnggc tgnaggtaaa agctgtttcta cagtcactct cttcctaata 60

cagtgtctgtg acgtnacttc taatagacga naattagana cagcctgctt gcccataaca 120

ggaaagtgat cactgagatg atagcgtgtc catttgatgg gccnctcag caacgtta 178

<210> 56

<211> 240

<212> DNA

<213> Rattus norvegicus

<223> unsure at all n locations

<400> 56

gatacctatgt tccgnccgaa catacctgtg tgagtgaat atgnanttct gaaaggatng 60

gtcacaacaac tacagaacgc acctcccggt ctctctgtct taagatgcta aatatgaaag 120

ccagngtttc acagcccaga tcatccacng cactgcttta ctgattcgga agtttctctt 180

gaggatactc cagatacacc tgagacatta tanatcatat atcaannngc acaaataatta 240

<210> 57

<211> 222

<212> DNA

<213> Rattus norvegicus

<223> unsure at all n locations

<400> 57

SO_3170 US

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taccagtgtc gctgtaactg aagaaatgcc acccctggaa ggagatgatg acacatcacg 120
catggaagaa gtagactagg cttcaccagn actatgtgtt tgatgcttac cttcattcct 180
tctgatnata tattttccat gattttngnt ttatttttgt ta 222

<210> 58
<211> 112
<212> DNA
<213> Rattus norvegicus
<223> unsure at all n locations
<400> 58

gatctagaaa gcacnnncag tttctggant tatagcacia atccacttgt attatctctt 60
tcatatnaca atttatgntc ccttggtgtca ttgtgnccc attcctgagt ta 112

<210> 59
<211> 176
<212> DNA
<213> Rattus norvegicus
<223> unsure at all n locations
<400> 59

gatctccttg cangettgac cctgtngcag taggcaccaa ggagaattac agtctcctga 60
gaagaaagct agnacaaatg cagaagaaag atgtctgac tgcccttcat gttgngagtt 120
tgtgagtggt tgcattganc ctctgttcag atctgtgtgt nnngttttagc cattta 176

<210> 60
<211> 91
<212> DNA
<213> Rattus norvegicus
<223> unsure at all n locations
<400> 60

gatctcagnt tccgctgtc tgtggaaaag gcaaaaaggc ccggtaatgg ctaccattgg 60
ggtgacacgg ggcttggnnn acacaacctt a 91

<210> 61
<211> 332
<212> DNA
<213> Rattus norvegicus

SO_3170 US

<223> unsure at all n locations
<400> 61

gatctggacg ctgntgnctt cagtgantng ctgcctctgt gccattgaca tccacaacna 60
aacactctat cacatcacan tgtggacatt cctccttgcc ctgggacact tcntctcgga 120
gttgtttgta tttggnacag oggetccac agttgggtgtg ctggcaccct tgatggtagc 180
aagttttctca atcctgggta tgctagttgg gctccggtac ctanaagcag aaccagtatc 240
cagacagaag naaagaaatt gaggccance ttgncagctc tgatacatca tggtnntcca 300
cctttgctct ntttanncac tctctgtcct ta 332

<210> 62
<211> 274
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 62

gatctgattc agaccaagga aaatatgcaa aatatgtgag ggcgcattgga atcactaggg 60
acaatatcat tgatctaacc aagactgac gctgtctcca ggcccaggga tgaagaaagg 120
cctgagcctc cagtggnnnn nnnnnnnnnn nncaccagga ctctagcatc accatttcct 180
gtccatggag catcctgaga caaattctgc gatctgatgt ccctcctctg tcacagaaaa 240
gtgcaatcct gtctctccag ctcttcctta atta 274

<210> 63
<211> 70
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 63

gatcttcaat tacnnngtgn atgctactca accctgaata nanttcatac acagnccagt 60
tatctgctta 70

<210> 64
<211> 280
<212> DNA
<213> Rattus norvegicus

SO_3170 US

<223> unsure at all n locations
<400> 64

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ggccacttac tataggtnat aaggctcactg tgnccctcag caggnccaag cactgcatgt 120
aggggaaggaa ggggtccagga gctgtccaga gcgccattta gctctccttc tgtttaggaa 180
ataaagacag agtgtgcaaa gagaggcagt cagcactccc tcntgctcag ggaaccctgg 240
acagctgtgg acaggcatgg ggtannncta ctcttcatta 280

<210> 65
<211> 202
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 65

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agacagacag gccatcagtg tggaatgtcc gagaaggcga ttgaaaagtt tatcagacag 120
ctactcgaaa agaattgactc aaagggaacca cccagctacc ctctccttat agccatgtat 180
aagtcnnctn actctgggat ta 202

<210> 66
<211> 162
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 66

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ggccaatgac accacgttng gactagcagc tggggctctt accaggacat tcagaggcgc 120
acaggtggcg gctgagctnc aggccgcnaa cgtgctacat ta 162

<210> 67
<211> 57
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 67

SO_3170 US

gatctttata gacatgaatg cacaactcat tgaatggcaa gaannttcct gtcatta 57

<210> 68
 <211> 131
 <212> DNA
 <213> Rattus norvegicus
 <223> unsure at all n locations
 <400> 68

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 tgtagtaaan agagaatgtc ttagtggtgtg tgtgagtgac agtgaaatc aatgncnnta 120
 aaaggacatt a 131

<210> 69
 <211> 77
 <212> DNA
 <213> Rattus norvegicus
 <400> 69

gatccacttc taatctggat gctgagctgg gaagacacac ccctttatca ggtcttgagt 60
 gagaagacac ctgttta 77

<210> 70
 <211> 353
 <212> DNA
 <213> Rattus norvegicus
 <223> unsure at all n locations
 <400> 70

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 acactttgga actgggtggtg tagccctcag tatcatcttg aacaccagtt ggggctcctg 120
 cagtgccctt tgtgcttcac tgggttttgg acgaagcagt gaggccctg ctctctgtca 180
 tgtagtgact gtagtggtgct gcgtgactat ctgggtcaag tccgtcaag aagatgaaag 240
 tccacagcaa aaggcangtt cgattcccag tgctgtctca cagctgctg tatcttgatc 300
 tgcaggggac cctgtgcctc tggtttctgt ggatacaaat gtgtatgcc tta 353

<210> 71
 <211> 187
 <212> DNA

SO_3170 US

<213> Rattus norvegicus

<400> 71

gatccggaga aagcttaggg agctgcagtt gagaaattgt ctgcgtattc ttatggggga 60
gctctctaata caccacgacc atcacgatga attctgcctt atgccttgac ttcggtcatt 120
tcccttgaga ttcatacctgt gattcccgt gtattcctag ccttgcatt ttcctgacat 180
gccttta 187

<210> 72

<211> 116

<212> DNA

<213> Rattus norvegicus

<400> 72

gatccgagcc tcttgtgcgt actgtgacac agaacagata tcaccagact ggagcccatc 60
atctgagccc caatgctctc tacacaccag aattctatct tttagcagtg acttta 116

<210> 73

<211> 147

<212> DNA

<213> Rattus norvegicus

<400> 73

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gttattagca gaatgaagga tggcctcaaa cgaagaaaga tgcacacccc tcgaggctct 120
tcagaatgct ggatagaggc ttactta 147

<210> 74

<211> 195

<212> DNA

<213> Rattus norvegicus

<400> 74

gatcctgggt gaccctccct gaagcagtga gcaccacagg ttctgctgtg gaccagagcc 60
cccctgtgga gagggagaaa gaaaggggag ccgtgacct gcagggatac agaccttccc 120
cacagcctgg cagccgcccg tttgttgacg cttattatca gactgtgggc tatcatagtt 180
catgctcgtt tctta 195

SO_3170 US

<210> 75
 <211> 100
 <212> DNA
 <213> Rattus norvegicus

<400> 75

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 ttgaacaact tattttcctt gtatcgatag aggggtgctta 100

<210> 76
 <211> 395
 <212> DNA
 <213> Rattus norvegicus

<400> 76

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 ctgcctgggc tgtctcatcc tgtcttctga gagcgtgggt cacagacctt gtgtctgagt 120
 gaagggaacc caggttcaga ttccgtttct ctgcttctgt ctttttctca gcagcagggt 180
 aggaacaggc cttttgtgca catacaacag atgaagccca tgatgagtct gtgggaaaca 240
 ccaacactca tgcacctgt gggtgacct cctacacag cgcagagcag agagagcccg 300
 ggagggtgctg caggcttcac tgagctttcc ttgccagac tggcaaccga ctttgctctc 360
 ttttgaaaga ctctagctaa agtcagcgtt gttta 395

<210> 77
 <211> 56
 <212> DNA
 <213> Rattus norvegicus

<223> unsure at all n locations
 <400> 77

gatctacagg atgatcaagc ttggtctagg taaattgcag gntacgtgtt cattta 56

<210> 78
 <211> 164
 <212> DNA
 <213> Rattus norvegicus

<223> unsure at all n locations
 <400> 78

SO_3170 US

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gccttacaac atcgctcaca tggaggccaa gggagcagcc gtgaaagtcg ccatcaacac 120
gatgaccagc gcagatttgc tcagtgcctt gagagcggtc atta 164

<210> 79
<211> 207
<212> DNA
<213> Rattus norvegicus

<400> 79
gatctccacc gaactggtga agagcaagct cagggagacc actggggcag cctgcaaata 60
tggggccttt gggctgcca ccactgttgc ccacgtggat ggtaaaacct acatgctatt 120
tgggtctgac cgcattggagt tgctagctta cctgctagga gagaagtga tgggcctgt 180
gcccccaacc ctgaatgcca gacttta 207

<210> 80
<211> 112
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 80

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atgacacatc ccgggagttg ccacactagc aagagcctgg ctgnttcctt ta 112

<210> 81
<211> 183
<212> DNA
<213> Rattus norvegicus

<400> 81

gatctccaaa ggccagaatt tccacagaca atctcttcac aactgtttgg aaggcattta 60
gcacaattcc tgtgtgagtt ggaatgatgt atttgcttac caaagctcaa gatcatccac 120
aggacaacca cagagtccac atcaaaggag agaggtggtc tttgttgatc cagactggcc 180
tta 183

<210> 82
<211> 118

SO_3170 US

<212> DNA
<213> Rattus norvegicus

<400> 82

gatctcctgg ttttctaaaa gactgaccaa taattcttca catgtcagaa tctgttatgt 60

ttgtctgacc tccatgggag attttgtttc tggctaaaat aaaggctaaa taagctta 118

<210> 83
<211> 264
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 83

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tgtgggttaga tggggacagg agtttttctc ccttgccctt ctggggatgg agaagggcta 120

aaccaagncc atgttgtctg gagaggtgca cccaggggtg aaggggtctg agaggccttc 180

cacctaccct cagagagcct gggttcctca ggggctcagt ggggcagcac tttttgttat 240

tgtcgtgata agttcgtagc atta 264

<210> 84
<211> 60
<212> DNA
<213> Rattus norvegicus

<400> 84

gatctcccag gactcaagac accagttggc agaggaagag cctggcttcg gttggcatta 60

<210> 85
<211> 136
<212> DNA
<213> Rattus norvegicus

<400> 85

gatcttggtg agtgtcacct tttttatatt tttgtttttc gagacagggg ttcttctgta 60

tagccctggc tgtcttgga ctctgtagac tgggctggct tetgactcag agctctgctt 120

gcctctgctg ggatta 136

<210> 86

SO_3170 US

<211> 85
 <212> DNA
 <213> Rattus norvegicus

<400> 86

gatccaaggt atgaagacgc agagtaaacc ctcagttatc aaacggaaaa agatgggcag 60
 ctaagatgca talaaagggg agcta 85

<210> 87
 <211> 145
 <212> DNA
 <213> Rattus norvegicus

<400> 87

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 accttccgtg gcttcttctc ccccaagggc accgatgtgt tccctatatt aggttctctg 120
 atgacagacc caaagttctt cccta 145

<210> 88
 <211> 346
 <212> DNA
 <213> Rattus norvegicus

<400> 88

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 ctactaagt gacaatacct tccttcgaga ccactaata cacgcttctt tcataccta 120
 ctcaggaagt gaccatgtca actgagccct tctgactgac tgtccgactg tccttgtaa 180
 ttgccactct catgtccctt cctctctca ctgccacact cctccatcag catgtagaga 240
 gtgtcttttt caactttggt ctttcctttt gtggacaaca tttctgcaa agagcaaggg 300
 tctggaactt gccctggcct ctgacccctg gatgtgtgtg ctgcta 346

<210> 89
 <211> 205
 <212> DNA
 <213> Rattus norvegicus

<400> 89

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SO_3170 US

ggagacccca tctcaaaaaa acaaaccaac cctgccctcc agtaaccgtc caggagagtg 120
 tgggtggtgca ggctgagccg ctctataccc agcctctgag aactttgtcc tctcggcaac 180
 ttgatagcct gcggttggtt ggcta 205

<210> 90
 <211> 211
 <212> DNA
 <213> Rattus norvegicus

<400> 90

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 acctgtatca gagagaattc tgggggggctt cgaggcaccr tacactccat gctccagttt 120
 tcagccgccc ccacctcacc cccatctctt tagtcttacc tgaggttggt tgacagcctg 180
 cctatgtttt ctctgttgtc ttctaccct a 211

<210> 91
 <211> 166
 <212> DNA
 <213> Rattus norvegicus

<400> 91

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 ccgttggcgt gtaggtatcg gattagtcag ccgtagttta cgtctcggca gatgtgggtg 120
 actgatgaaa atgctgttat ggtatcagac gtgtagtgta ttgcta 166

<210> 92
 <211> 148
 <212> DNA
 <213> Rattus norvegicus

<223> unsure at all n locations
 <400> 92

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 tgaggtttcc tcattgcatg cgataggggtg atcatgattt cccactaac tcattttctg 120
 gctggcctct tttatanagc tcgcccta 148

<210> 93
 <211> 52

SO_3170 US

<212> DNA
<213> Rattus norvegicus

<400> 93

gatccatgga ggtggactaa taatagcgga gcacaccct atagtgtgac ta 52

<210> 94
<211> 43
<212> DNA
<213> Rattus norvegicus

<400> 94

gatccatttc ttttagcagtt gaaacagctg gccattgtaa cta 43

<210> 95
<211> 228
<212> DNA
<213> Rattus norvegicus

<400> 95

gatcccagcc gtcgtggatc ctctcaccat tacttcttcc ctgtcatcgg atggagtcct 60

cactgtgaat ggaccaagga aacaggcctc tggccctgag cgcaccattc ccatcaccgc 120

tgaagagaag cctgctgtca ctgcagcccc taagaagtag attcccttcc ctcggttgcac 180

tttttaagac aaggaagttt cccatcagcg aatgaacatc tgtgacta 228

<210> 96
<211> 103
<212> DNA
<213> Rattus norvegicus

<400> 96

gatccccaag actgtggact ggagagaaaa gggttgtgtg actcctgtga agaatacagg 60

ccagtgtggt tcttgcctggg ctttttagcgc atcggtgtgc cta 103

<210> 97
<211> 343
<212> DNA
<213> Rattus norvegicus

<400> 97

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SO_3170 US

cccccttgcc tgaagccct tctaagctcg gcttgagaac tctctctcac ccttcaccct 120
 tcccagccca aggtcccgag ggtcccatca gtgctgatga gtctggcctt tgagcttttc 180
 ttgacaattc ctaatgggtc taaagcctgg agcccccgga aactgtgagc taaggagaca 240
 tagcacaaaa tcataaatga gttgcgggga gaggtctgga acagtgtgca agaaatacag 300
 gccagggggtt ggggatttag ctcagcggta gagecgttgc cta 343

<210> 98
 <211> 50
 <212> DNA
 <213> Rattus norvegicus

<400> 98

gatccccatt agcttgtgcc tgtggccaga aaaggccaaa gccagcccta 50

<210> 99
 <211> 48
 <212> DNA
 <213> Rattus norvegicus

<400> 99

gatccctggg gcttgcctggc cagccagaag ctgcacatgt gagctcta 48

<210> 100
 <211> 72
 <212> DNA
 <213> Rattus norvegicus

<400> 100

gatccctaca agaggaagac aagacttcaa catagtgtgt gagectattc ttcttcggtc 60

cgatcatacc ta 72

<210> 101
 <211> 200
 <212> DNA
 <213> Rattus norvegicus

<400> 101

gatccctgcc atctgcgaca tccccacga gatgcacatt tcttttttgc ccccatccga 60

acactcaaac accctgtatt catctaaggg tctgggagag tctggggtgt tcttgggctg 120

SO_3170 US

ttcgggtatatt tttgccatcc atgacgcagt gagggcagcg cggcaggaga gaggcattctc 180
 tggaccatgg aagctcacta 200

<210> 102
 <211> 143
 <212> DNA
 <213> Rattus norvegicus

<400> 102
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 ctgtttttgag aactccggat actactttga ctctggcttg gggcgaagga agtgcacccc 120
 agatcaaaaag caacacattt cta 143

<210> 103
 <211> 343
 <212> DNA
 <213> Rattus norvegicus

<400> 103
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 gtgtgttctg cctgctcagc ccctgccaca gaggcctgga ggtgtgggag tgtggcctaa 180
 gcacagtctg ccacccctga ccgcagacct cttggaccca cccccactcc ctccagacac 240
 tggtaagaga agccttctct caacatgtcc tgtcctcagg aggtgagaca gcagagtgcct 300
 tccattcact cgatgacccc atttttgctc ttcccttggg cta 343

<210> 104
 <211> 41
 <212> DNA
 <213> Rattus norvegicus

<223> unsure at all n locations
 <400> 104

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<210> 105
 <211> 67
 <212> DNA

SO_3170 US

<213> Rattus norvegicus

<400> 105

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tgctcta 67

<210> 106

<211> 192

<212> DNA

<213> Rattus norvegicus

<400> 106

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agatcttaac caggcagtca ccaaggcctt tgaattccct ttcagctcca gctttgcccc 180

catcagctgc ta 192

<210> 107

<211> 97

<212> DNA

<213> Rattus norvegicus

<400> 107

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gaggctctcc cgagactccc tgtactcacc cctgcta 97

<210> 108

<211> 42

<212> DNA

<213> Rattus norvegicus

<223> unsure at all n locations

<400> 108

gatcctatcg tgacctgttg gacangaagg gagtgtttgc ta 42

<210> 109

<211> 67

<212> DNA

<213> Rattus norvegicus

<400> 109

gatcctatct taaagtagaa tgaaatctag ggttggggat ttagctcagt ggtagagcac 60
 ttgccta 67

<210> 110
 <211> 207
 <212> DNA
 <213> Rattus norvegicus

<400> 110

gatcctcacc gtggaggacc actactatga aggtggcata ggcgaggcag tatctgctgc 60
 ggtagtgggc gaacctggag tcacagtcac tcgcctggcg gtcagccaag taccacgaag 120
 tgggaagcca gctgagctgc tgaagatggt tggatttgac aaagacgcca ttgtgcaagc 180
 tgtgaagggc cttgtcacca agggcta 207

<210> 111
 <211> 271
 <212> DNA
 <213> Rattus norvegicus

<400> 111

gatcctccat gacaagggaa caggaagaaa tgataatatg aatggtggat catgaatatc 60
 ttcacaatct ttccctgtga tgaattagca tctccagctc tctgcctata tagtagatat 120
 ggaccacaaa gaagtaaata atggtgtgca atttttgtca aggaatcttt agaggccac 180
 acaattccaa attctcactt catgtcagag attgaatgat tgaaaagctt tctgcagtaa 240
 attatttacc ctattttctt agcatgtact a 271

<210> 112
 <211> 415
 <212> DNA
 <213> Rattus norvegicus

<400> 112

gatcctcaaa gtggctcagg aacactttgg caaaggcaaa tcaaaagact tccaactggt 60
 cggtctctct cttgggaaag acctgctggt taaggattct gcctttgggc tggtacgggt 120
 gcccccaagg atggactaca ggtgtacct cgccacagc tatgtcactg ccattcgaaa 180
 tcagcgggaa ggcgtgtgcc cggagggctc catcgacagc gcgccagtga aatggtgtgc 240

SO_3170 US

actgagtcac caagagagag ccaagtgtga tgagtggagc gtcagcagca atgggcagat 300
 agagtgtgag tcagcagaga gcactgagga ctgcattgac aagattgtga atggagaagc 360
 agatgccatg agcttggatg gaggtcatgc ctacatagca ggccagtgtg gacta 415

<210> 113
 <211> 152
 <212> DNA
 <213> Rattus norvegicus

<400> 113

gacacctca gaacaccagt ctgtgccaat gagggagcag catggcctct gagtgaggag 60
 gtgctgggtg taagaccaca cctccagag ggaagaaagg ctctctctg ggttgtgcgc 120
 tgactttctt atactgctcc cttgtgccac ta 152

<210> 114
 <211> 295
 <212> DNA
 <213> Rattus norvegicus

<400> 114

gacctgaag agcaatgagg gacgtgccct ttgcgcgcca gcaccagcgc aatgtcaagc 60
 ttatgaggca gatgctaatt gacgtggcc cccagtcac ccaactgccc agccacatca 120
 tccctgtgcg ggttgccctga tgctgctaaa aacacagaaa tctgtgatga agttgatgac 180
 caggcataat atctacgtcc aggccattaa ttaccaaca gtgcctcgtg gggaggagct 240
 cctccggatc gccccacccc cgcaccacac accgcagatg atgaacttct tecta 295

<210> 115
 <211> 76
 <212> DNA
 <213> Rattus norvegicus

<400> 115

gaccttgcc tgccactatt tctgtgatct caatgttttg tttctctctg acttctgaca 60
 ccaagctgat ttgcta 76

<210> 116
 <211> 290

SO_3170 US

<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 116

gatctaaaag tatcgccctt catgagaaag ggaattgtag gagactggag gaaccacttc 60
cctgaagccc tgagggagag atttgaggag cactaccagc ggcataatgaa ggactgcctc 120
gtgaagttta gagcagagct ctgagacact tccctgtgtc tgaaattgga gtagtctcca 180
atctatcctt cagtttttct tgttttgaat tcagtagaag tagaagtctt ttgaagactg 240
atgggtttaa ttcattctgg ttttttaaac naacntttat tttaatctac 290

<210> 117
<211> 228
<212> DNA
<213> Rattus norvegicus

<400> 117

gatctaacca agactgatcg ctgtctccag gcccgaggat gaagaaaggc ctgagcctcc 60
agtgtgagt ggagacttct caccaggact ccagcatcac catttctgt ccatggagca 120
tcttgagaca aattctgcga tctgatttcc atcctctctc acagaaaagt gcaatcccgg 180
tctctccagc atcttcccta gttaccagg acaacacatc gagaatta 228

<210> 118
<211> 93
<212> DNA
<213> Rattus norvegicus

<400> 118

gatctactta aaaactgctt cgtgacaaaa accacacctg aagaaatctt aagaatttgg 60
cacagttagt cactttgtgt caccoggaat cta 93

<210> 119
<211> 145
<212> DNA
<213> Rattus norvegicus

<400> 119

gatctacacc acagtttcta acagtagcaa cattacagcc atgaagtagc agtgaaaata 60

SO_3170 US

acttgatggt ggggggaatc accagaatat gaggaactgt attaaagggt cgcagcattc 120

ggaaggttga gaagccactg ggcta 145

<210> 120
<211> 34
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 120

gatctacatt ggaaggcgtn gacaactanc acta 34

<210> 121
<211> 45
<212> DNA
<213> Rattus norvegicus

<400> 121

gatctaggcc cctttcctcc tctaacttc tttctctcct ggcta 45

<210> 122
<211> 363
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 122

gatctcattg gtgcaggagc agagacaatg agcacaacat tgagatatgc tctcctgctt 60

ctgatgaagt accncacatg tcacagctaa agtccaggaa gagattgacc gtgtgattgg 120

cagacatcgc agccccctgca tgcaggatag aaaacacatg ccctacacag atgcatgat 180

tcatgaggta ncagagattc attaactttg tcccagccaa cctgccccat gcagtgcact 240

gtgacattaa attcaggaac tacctcatcc cgaagggaac aaaagtgtta acatcactga 300

catcagtgtc gcatgcagc aaggagttcc ccancccana gatgtttgcc cnanccactt 360

cta 363

<210> 123
<211> 132
<212> DNA
<213> Rattus norvegicus

SO_3170 US

<400> 123

gatctcaggg gaggtatgct taaggccaga gctcttctc agtatttgat tttccagtg 60
 tttgtttttt taaaaactga caggtgctac attctatct gttggtttca attctgcat 120
 atttcatgtc ta 132

<210> 124

<211> 89

<212> DNA

<213> Rattus norvegicus

<400> 124

gatctcagca gcctgggtgt cacagtagaa taagaatggc tggcctaac ctctcctgtg 60
 agtgacgtga atgaatgcct acctggcta 89

<210> 125

<211> 206

<212> DNA

<213> Rattus norvegicus

<400> 125

gatctcattg atcacagcct ggggtgtaggg catcttcatg tggctctcat actgaggctg 60
 tcggttcctg ccgatcacct gctcaatttc ctcatggacc ttggcctcca catctggatg 120
 ctctcatgagt agaaggaagc cgtagcgtag tgtggagctg actgtctcag acccagcaaa 180
 gaagaggctt agtggtgtca tcaacta 206

<210> 126

<211> 71

<212> DNA

<213> Rattus norvegicus

<400> 126

gatctcccag atcaagtctt ctttgccatc tccatttcca gccacaacag catgagaagg 60
 gatccgggct a 71

<210> 127

<211> 129

<212> DNA

<213> Rattus norvegicus

SO_3170 US

<400> 127

gatctccccg ggagtgatgc tggaagaaag gcaaagccag aaactcaata aagtatgacg 60
 tttaacgtgt ggctccagg tgctttctta ctgtttgcc aattgagct gcctcaagac 120
 aaggtacta 129

<210> 128

<211> 247

<212> DNA

<213> Rattus norvegicus

<400> 128

gatctctccc gagagacaca gccagaatac agcaaataca taggcaaattg ccagcagcaa 60
 accaccgaac tgaaaacggg acccccgttt aaggaatcag agaaaggact ggaagagctt 120
 gaaggggctt gagaccccat atgaacaatg ccaagcaacc agagcttcca gaaactaagc 180
 cactacccaa agactgtaaa tggactgacc ctgggctcca acctcatagg tagcaatgaa 240
 tagccta 247

<210> 129

<211> 347

<212> DNA

<213> Rattus norvegicus

<400> 129

gatctctgcc tacatgaaga gcagocgcta cctctcaaca cctatatattt cgaagttggc 60
 ccaatggagt aacaagtagg cccttgctac actgggcact cacagagagg acctgtccac 120
 attggatcct gcaggcaacc tggccttctg cactgtgggt ctctctcctt cctgtccct 180
 tctccagctt tgtcagcccc atctctcaa cctcaccaca gtcattgcca catagtcttc 240
 attctcccca ctttctttca tagtgggtccc cttctttatt gacaccttaa cacaacctca 300
 cagtcctttt ctgtgatttg aggtctgccc tgaactcagt ctcccta 347

<210> 130

<211> 431

<212> DNA

<213> Rattus norvegicus

<223> unsure at all n locations

<400> 130

SO_3170 US

gatctgactg aaatgattat gcaattggta atatgtcccc cagacaaaaa agaagccaag 60
 accgccttgg caaaagacag gacaaaaaac cgggtacttgc ctgcctttga aaaggtggtg 120
 aagagccatg gccaagacta ccttgtaggt aacaggctga cccgggtaga catccacctg 180
 ctggaacttc tctctatgt tgaagagttt gatgccagcc ttctgacctc ttccctctg 240
 ctgaaggcct tcaagagcag aatcagcagc ctccccaatg tgaagaagtt cctgcagcct 300
 ggcagtcaga gaaagcttcc cgtggatgca aaacaaatcg aagaagcang gaagattttc 360
 aagtttttagc ggagctgcac tgtccaatth ctttatgctt tgcanaaaat gagaagcaat 420
 tgttgatcct a 431

<210> 131
 <211> 180
 <212> DNA
 <213> Rattus norvegicus

<400> 131

gatctggatg aaatagttct ccattacctt tacattcccc ctggggagaa agaggcaagt 60
 cttgccaaaa tcaaggacaa agcaaggaac cgttactttc ctgcctttga aaaggtggtg 120
 aagagccatg gacaagatta tctcgttggc aataggctga gcagggtga tgtttaccta 180

<210> 132
 <211> 156
 <212> DNA
 <213> Rattus norvegicus

<400> 132

gatcttactg tgcacagctt tagatcatga tgtttagcag attgtaactt ccattcatga 60
 gaagaaaactg cacaaacctt ctcatctctg tcttatcttt attgtattgg aagctttctt 120
 taagttacca tattttagag cgttgtagt gcccta 156

<210> 133
 <211> 187
 <212> DNA
 <213> Rattus norvegicus

<400> 133

gatcttcagt taattcagtc agctatggat aactgtacc cacaaagcca gcctcagaaa 60

SO_3170 US

gctctgcaac aatgaagtat tttgactaaa tgttgaccgt acttattggg agggtaacat 120
 gttttctaag gcttctgtgt taattcatat agacatgact catgaggaat tgctgggatg 180
 ccatcta 187

<210> 134
 <211> 295
 <212> DNA
 <213> Rattus norvegicus

<400> 134

gatcttggtta acctgacgga agcacagaga ctgcagaatg ttggcaatgc cagagaatat 60
 gttcctgtgg gaaagggtccc agatacacac tccagagcta actctgaaac gtcaagaaat 120
 caaagcccag aatctcgtgt aggcgaatgg agactcccca aaggacacga aacagctggt 180
 aaagtagcgg gcagtgtgtc cgagaagctg ccctccagca gcctgtctcat ggacagagct 240
 gaagcagcca gccttgacac gtcggcaggg cacgaggact gggaagtggg gtcta 295

<210> 135
 <211> 93
 <212> DNA
 <213> Rattus norvegicus

<400> 135

gatcttggca aggggaatgg tcagcatcag cccttgctct cagcctgtgc tttgagctct 60
 tgtcccatc cctcacactt tccctccatg cta 93

<210> 136
 <211> 156
 <212> DNA
 <213> Rattus norvegicus

<400> 136

gatcttgaga ggtgccctgg gatgaatgcc gtttacagtg tgcattgctt ttgaggtgtg 60
 ttggaaaagt gcagcgaatt ttaacgtatg tgatccgcca tgctgtgaaa aactatttgg 120
 gatacctccc ctgtgacggg attggaggtt tggcta 156

<210> 137
 <211> 73

SO_3170 US

<212> DNA
<213> Rattus norvegicus

<400> 137

gatcttggtc atcacatgac ctcttgcggt ggtcacaggg agtaaaaatg tgtccctgtc 60

ctgttggtcag cta 73

<210> 138
<211> 137
<212> DNA
<213> Rattus norvegicus

<400> 138

gatcttgaag ttttcatgat ttttaagagt cagaatcttt tgtgatgatt cacagtacgc 60

ttagaataag gtgatttttg tttagccac agactcatgg gagtagatta gtgtaagtta 120

ggatgaactt cacccta 137

<210> 139
<211> 125
<212> DNA
<213> Rattus norvegicus

<400> 139

gatccaggct ccagttgtca tggctgcttt gatgagccct tcccgaaga cttgcttgag 60

tttgggctgg agttcaaagt tctgcagccc tccgtgcaca gagatgagaa gtttgggaag 120

ctcta 125

<210> 140
<211> 103
<212> DNA
<213> Rattus norvegicus

<400> 140

gatccatgga ggtgcactgg ttataggcat ggcttcattg tatgatggct ccattgctggc 60

agccatggag aatgtagtgg tggtcactat ccaataccgc cta 103

<210> 141
<211> 172
<212> DNA
<213> Rattus norvegicus

SO_3170 US

<400> 141

gatccaacca caaaccacaca gggtagacaca ctggatgtct ccttcctcta cctggagcct 60
gaggaaaaga aactggtggt cctgcctttc cctgggaagg aacagcgctc cctgagtgct 120
ccggggcccg aaaagcaaag aacccccctga tgctccccgc tgagactcac ta 172

<210> 142

<211> 238

<212> DNA

<213> Rattus norvegicus

<400> 142

gatccgtgct ggccacaccc agagcaccaa ggatggggag ctcaggccat atggccaagc 60
atgtgtggat gacagcaaag gtcagaagct actgcctgcc cctctggttt agatggttgc 120
tcaggagccc agacttcgac tcatggtgtg ccaggaggag ctggggacaa caggggggtcc 180
cttcccaggc ccatctgctg cccacactg atctgcctgt cttttctgct gctctcta 238

<210> 143

<211> 104

<212> DNA

<213> Rattus norvegicus

<400> 143

gatccgtatc tggtgttagc ttcgtcctc agcaaacaga gcgcccatga aagccccaat 60
ggatgtccct ccgattatgt ccacggggat gccacattct gcta 104

<210> 144

<211> 178

<212> DNA

<213> Rattus norvegicus

<223> unsure at all n locations

<400> 144

gatccgggac agtgcagggc agaagggcac tgggaagtgg acggccatct ccgcgctgga 60
gtacggcatg cctgtcacc ccatcggaga agctgcttct gctcgggtgct tgtcttctct 120
gaaggaggag cgagttcagg ccagcagana gctgaagggc cccaagatgg tccagcta 178

<210> 145

SO_3170 US

<211> 157
 <212> DNA
 <213> Rattus norvegicus

<223> unsure at all n locations
 <400> 145

gatacctaaag cgcaaagtca tagagaaagc gcaacagatt cagggtctgc agaaagacgt 60
 ccgggatcag ctgatagaca tgaagcgccct gnaggtaagc ctgaggcncn ggcccccaatt 120
 tgtcttttgac taagaaaaaa ggaatangaa cactcta 157

<210> 146
 <211> 207
 <212> DNA
 <213> Rattus norvegicus
 <400> 146

gatacctccgg gttatagatc aagagcttca tgggggttagg atggcatcct gccaaaatat 60
 ctccggtggc tggatcaaca gtcagggttat ccactaaggt gccagctga attaccttca 120
 ctggagttaa atcccaatta ttgtgttttt tcattatgtg aatgttctta gctgttacat 180
 cagctacata gacatacttc tgggteta 207

<210> 147
 <211> 453
 <212> DNA
 <213> Rattus norvegicus

<223> unsure at all n locations
 <400> 147

gataccttagc ccatgcagca gtgttctttc cgttcgtgtt ttccaggaca gtctggtgct 60
 tcacaaaggc tacgtctccc ttctcaacga ggcactggaa agcccttgta taaccattat 120
 atccctctct gttgttcgga gcacatcttg ctgggccaat acacaggtca cagaggggtg 180
 aattcttctt atagccagga gcacagcctt gactgaaaaa ttcacgaac ttgcagtgg 240
 tgatacctgct gaacagcagg cccatagggg tgttccagcc ggcggttctg tctactccag 300
 tatggcagga cttcttgcct ttcagggttg lccagttgat gctggagtct gatgccttca 360
 ccacagccac ggcataatac ccttttaggaa agacatctga ttgtgggttt gtacacgaag 420
 agatatcata gttctctgcc atgaenggca cta 453

SO_3170 US

<210> 148
 <211> 140
 <212> DNA
 <213> Rattus norvegicus

<400> 148

gatctatttc ttcattcttt gttctataca atagaatgcc tctctgtctt gaagtcagtc 60
 caagaaatgc ttaatgggtt cctgtattct ttcttctctg attactcagt gctgagtgga 120
 gacttctcac caggactcta 140

<210> 149
 <211> 258
 <212> DNA
 <213> Rattus norvegicus

<400> 149

gatctacgca accgactcgg gcagtaccgc aacgaggtaa acaccatgct gggccagagc 60
 acagaggagc tgcggtcgcg cctctccaca cacctgcgca agatgcgcaa gcgcctgatg 120
 cgggatgcgg atgatctgca gaagcgcttg gcggtgtaca aggcgggggc acaggagggc 180
 gccgagcgcg gtgtgagtgc tatccgtgag cgctggggc cactggtgga gcagggtcgt 240
 cagcgcacag ccaacctta 258

<210> 150
 <211> 98
 <212> DNA
 <213> Rattus norvegicus

<400> 150

gatctagaag gcaagagtaa tctcgggtgct gacgctccac atcagaacgg tgaatgccac 60
 cctaatagaga agggctctgt cagcatggac ctggacta 98

<210> 151
 <211> 64
 <212> DNA
 <213> Rattus norvegicus

<400> 151

gatctagatg acacggagga gcccaggac cttccctgag gtgatttcac ccttggtgcc 60

SO_3170 US

acta

64

<210> 152
 <211> 136
 <212> DNA
 <213> Rattus norvegicus

<400> 152

gatctccaca tcagtactac aatggctatg agaaaggcct gcaagctttc tccatggaca 60
 aacacctggg ccacggcttc gctccgcagg tagatatttt cgatcttttc tggagctatg 120
 tactctcctt gggcta 136

<210> 153
 <211> 132
 <212> DNA
 <213> Rattus norvegicus

<400> 153

gatctccgga ggtgcggtgc ctctggttgt aagaccagct ttgaagcact cctacagagc 60
 catctgagca gaggggcctg gcactccagg caggcgagcg atgctcaagc ttgttaccag 120
 tctggtctcc ta 132

<210> 154
 <211> 218
 <212> DNA
 <213> Rattus norvegicus

<400> 154

gatctccacc gaactggtga agagcaagct caggagagacc actggggcag cctgcaaata 60
 tggggtaagc aactacatgt gtattcccag tccctgtcta aagatagaga cgatcatgtt 120
 ccatagctgc tcacgctcct gtgagctgcc ttctcccat cctaagtcct cctcagcttt 180
 cctaaacacc tcatccactc ccttcctccc taagccta 218

<210> 155
 <211> 124
 <212> DNA
 <213> Rattus norvegicus

<223> unsure at all n locations
 <400> 155

SO_3170 US

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 tactggcttc gttcagaatg aaaattgctc tcagcagncc tcattgatat ttgtgcctcc 120
 acta 124

<210> 156
 <211> 218
 <212> DNA
 <213> Rattus norvegicus

<400> 156

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 aactgctgtg tgctgtggtg cctttcgaag ggcattggtc atcgttctcc gggcttcaga 120
 gtactccagt tggatagcct tgattcgccc tgtgtagtag aggtacctgg cccactcatt 180
 gttgttagcc tgttcgggga acacagaatt ggacacta 218

<210> 157
 <211> 43
 <212> DNA
 <213> Rattus norvegicus

<400> 157

gatctcattt taaccogtaa ccagttctata tgtgtttgga cta 43

<210> 158
 <211> 357
 <212> DNA
 <213> Rattus norvegicus

<400> 158

gatctgaagc aggaagactt ccagctgctg tgccctgatg gtaccaagaa gcctgtaacc 60
 gagttcgcca cctgccacct ggcccaagct ccaaaccatg ttgtggtctc acgaaaagag 120
 aaggcagccc ggggttagcac tgtgctgact gccagaagg atttattttg gaaaggtgac 180
 aaggactgca ctggcaatct ctgtttgttc cggctctcca ccaaggacct tctgttcaga 240
 gatgacacca agtgtttgac taaacttcca gaaggtacca catatgaaga gtacttagga 300
 gcagagtact tgcaagctgt tggaaacata aggaagtgtt caacctcacg actccta 357

SO_3170 US

<210> 159
 <211> 47
 <212> DNA
 <213> Rattus norvegicus

<400> 159

gatcttggcc ttcacgttct cgatggtgtc actgggctcc acctcta 47

<210> 160
 <211> 113
 <212> DNA
 <213> Rattus norvegicus

<400> 160

gatcttatca caccagccag caaagtaccg gaagggtctgg atggacatgc ccacgtgcgt 60

cttcagggcc agcgtgtaga cggcacctgc atccagggcc tcaatggtgg cta 113

<210> 161
 <211> 163
 <212> DNA
 <213> Rattus norvegicus

<400> 161

gatcttggat gatgacaatt ttctgggagc tgagaatgcc ttttaacttgt ttgtgtgtca 60

gaaggacagt gctgccacca ctgatgagga gcggcagcac ctacaggagg ttggtctctt 120

ccacctgggc gagtttgtca atgtgttctg ccattggctcc cta 163

<210> 162
 <211> 180
 <212> DNA
 <213> Rattus norvegicus

<400> 162

gatcttgggtg accatgctac cctgaagagg tccccaggag attgcaagag tgccccaaact 60

acagaggaga ctgcagget gtctcaggcc atgatggctt ttactactga cctgttctcc 120

ctggtggccc aaacatccac cagctccaac cttgtcctgt cacccttag tgtggcccta 180

<210> 163
 <211> 179
 <212> DNA
 <213> Rattus norvegicus

SO_3170 US

<400> 163

gatcttaact gcagattcta cacatttctc atcctcta at ggcttctct ggctgccagg 60
 ctgaagaaac ttcttcaactg tggggagggt gctgactctg gttctcaggg ccttcagcag 120
 agggaagtgt gccaaagcgc tgggggtccag ctcttccaca tggtagagaa cttgaacta 179

<210> 164

<211> 217

<212> DNA

<213> Rattus norvegicus

<400> 164

aattcacagc tgaggaatgc taaatggctg agaagcacct aaagaaatgt tcaacatttt 60
 tagtcataag ggaaatgcaa atcaaaacaa ccctgagatt ctacctaca ccagtcagaa 120
 tggctaagat caaaaactca ggtgacagca aatgctggaa aggatgtgga gaaagaggaa 180
 cactcctcca tttttggtgg gattacagaa tggttta 217

<210> 165

<211> 197

<212> DNA

<213> Rattus norvegicus

<400> 165

aattcacaga gacggctgcc atatttgaag atggctccag ggaggatgac attgatgtgg 60
 tcatctttgc cacaggctac agctttgctt ttccttttct tgaggactct gtcaaagtag 120
 tccaaaacaa ggtctccttg tataaaaagg tctttcccc taacctggaa aaaccaactc 180
 ttgcaatcat cggttta 197

<210> 166

<211> 419

<212> DNA

<213> Rattus norvegicus

<400> 166

aattcagttt acatcttggc cacagcccat ctctctctc ttccttagtc ccctccttgc 60
 cagatccctg tcccaattgc cccctccact tgggtaccac ctaaccctgg gacatctgct 120
 tcatgtagta ctagctatat cctttctcac tgaggcctaa ccaggcagtc ttggttaagga 180

SO_3170 US

tgagatccaa tgctaggaac tatagactga gacaacccca gttctgttgg gagcagctaa 240
 agatggcacg acatccagtg gtcttttgtg gtatacaacc ataacatggg tatatagcca 300
 tgtccctggc cttcttcttg catttacaag gccaggggtga taagcatgtc aataaggtat 360
 ctcacacccc accaatcctc agaaggacaa gtttacagcc actgcctgtt ttgtactta 419

<210> 167
 <211> 159
 <212> DNA
 <213> Rattus norvegicus

<400> 167

aattcagtct tatcaatgaa ggtcagagcc attgggaaag gtgaagtggg ggagccctgt 60
 catcgatccc aactgggtcg gaaccctccc acgcagact caattcagag ctgtttccca 120
 ggaggctggg gcgggatgca gacagattcc aacacctta 159

<210> 168
 <211> 110
 <212> DNA
 <213> Rattus norvegicus

<400> 168

aattcagcag aactccttga gggaaaatca tgatccagtt atgatttcat cccgtggcac 60
 aacctttaga ataatgggtt ttgttggttg aagaagtcct tgtctgctta 110

<210> 169
 <211> 199
 <212> DNA
 <213> Rattus norvegicus

<400> 169

aattcatcgt aaatggactc ctcaacaaaa agtctggatg ctgcgacaca aatctgacct 60
 tgggtgaaga atactccttg gtgtgcaaac tcatcagcac tatccaagtc agcatctgca 120
 aacacaatgc aagggtcttt tcccccaagc tccaggggtga ccctcttcag attgcttttc 180
 cctgcagctt ctttgatta 199

<210> 170
 <211> 380

SO_3170 US

<212> DNA
 <213> Rattus norvegicus
 <223> unsure at all n locations
 <400> 170

aattcctagg gaagtcggaa ccagagcgcc agcactgagc ctggcccgtg aaggagcatg 60
 qaqaccacc ttccctccct tctccctgaa cagcagtctg gcaccagaa gctcagagtg 120
 ccaccacctg tgggtgctcag gagcccagcc tagaaagagg actccgacac agcgggcagn 180
 ggctccacag acggatctat gaggaaaata cgggggcagg cangcaggca ggcgaccccc 240
 tgacctctg gtggccgctg tatctgagcc cttttgggaa ggcttataga caacaggtgg 300
 agcccatag ctgggcatag ggagcctggg aagggtcag gagtcagga ccactccagg 360
 ctctctagca ccaccgctta 380

<210> 171
 <211> 366
 <212> DNA
 <213> Rattus norvegicus
 <400> 171

aattccctgg cttggcagac gtcaccatcg cagaagtgga ctgcaccgct gagcgtggtg 60
 tttgcagcaa gtactcggtg cgaggctacc ccacattgct gcttttccgg gggaggtgag 120
 aaagtgggtg agcacaatgg aggcagagac ctcgactctc tacacagctt tgttctgcgc 180
 caggcaaagg atgaactcta agaaccctgg tgaagccgtc atccaccctg gccttatgca 240
 ccccgatcat aggagtgacc tcacatggac atgcgtatct tcaactgtgt tagtcagaac 300
 gctgaatgta ttgagcttgt gttgcttgcg gtgtgccctt tgagccacca cacactacgg 360
 acctta 366

<210> 172
 <211> 339
 <212> DNA
 <213> Rattus norvegicus
 <400> 172

aattccatca gtaaagctaa agcagctacg tctggtcggg tctcttcttg atctgtttct 60
 agatatggaa gcagctacag ggcaggaggt cgagctatgt ttagaatgca tcgaatgggc 120

SO_3170 US

caaatcagag aaaagaacct tcttacgcca agcattggag gcaaggctgg tgtctttgta 180
 ttttgatacc aagaggtccc aggaagcatt acatttgggt tctcagctgc ttcgggagtt 240
 gaaaaagatg gatgataaag ctcttttgggt gaagtacagc ttttagaaag caaaacttac 300
 catgctctga gtaatctgcc gaaagcccga gctgcctta 339

<210> 173
 <211> 290
 <212> DNA
 <213> Rattus norvegicus

<400> 173

aattccaaga gtctgaggtg gtggcaccca ccgttctggc caggggtgct ttggaaacat 60
 gtgtcgtgga ggccgcatgt ttgcaccaac caaaacctgg cgtcgttggc atcgcagagt 120
 gaacacaact cagaaacgat atgccatctg ttctgccctg gctgcctcgg ccttaccagc 180
 tttggtgatg tctaaaggtc atcgtgttga ggaagttcct gaactgcctt tgggtggttga 240
 agataaagtt gaaagttata agaagaccaa ggaggctggt cagctgctta 290

<210> 174
 <211> 199
 <212> DNA
 <213> Rattus norvegicus

<400> 174

aattcctaac actcaggctc tgcccgtggg cttggctgca ggacagcgac ttgactccat 60
 gacttgactc caccocagct tccaccttgg ccgggactgc tctaccctgt gagccaaaca 120
 ctttaggtgt aagtaggtac actttgtgat gtcactgacc tagtgtacce tttctttttt 180
 catatctata ctgacctta 199

<210> 175
 <211> 165
 <212> DNA
 <213> Rattus norvegicus

<400> 175

aattcccagc aacagatata atgaggggct gcgctgagct cttcctgcca gaagcagacc 60
 atcttctcac ggcatccctc atctcacaag tgtccaggac catggggaca ttgcattcaa 120

SO_3170 US

agcacggtac ctgctttcta attgatgggc aagggttatat gctta 165

<210> 176
<211> 46
<212> DNA
<213> Rattus norvegicus

<400> 176

aattccagca ataagaaatg aacaaagatt ggagctgaag acctta 46

<210> 177
<211> 39
<212> DNA
<213> Rattus norvegicus

<400> 177

aattccgaat gtggattgtg attttcctgc ttccactta 39

<210> 178<211> 283
<212> DNA
<213> Rattus norvegicus

<400> 178

aattccaccc aaggctgctg ggtctgactg gttctacaga acaagtggcc catgctagtc 60

gcaactaccg tgtatactac agcgctgggc ccaaggacga ggaccaggac tatattgtgg 120

accattccat tgccatctac ttgctcaacc cagatgggtct ctccactgat tactatgggc 180

gtagcagggc agcagagcag atcgtagaga gtgtactgcc ggcacatagc tgccttccat 240

agcatactgc cctgaactgt gtactgccta ggccctgtca tta 283

<210> 179
<211> 223
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 179

aattccacag aagggtgtat ggagatttga tggtaagaaa ccagatacct taggatctaa 60

cactcggctg tacaagtgga tccccagaa tgaenttctt ggtcatccna aaaaccnaaa 120

gctttttag ctcatgggtg aacaaatggc atctatgagg caatctacca tggcattcct 180

SO_3170 US

attgttggtta ttcccttggt tgcagatcaa ccggataaca tta 223

<210> 180
 <211> 182
 <212> DNA
 <213> Rattus norvegicus

<400> 180

aattccctgg ctttctgggt ctagagtgtt ctgtgcctcc aaggactgtc tagcgatgac 60
 ttgtattggc caccaactgt agatgtatat acggtgtcct tctgatgcta agactccaga 120
 cctttcttgg ttttgcttgc tttttctgat ttataccaa ctgtgtggac taagatgcat 180
 ta 182

<210> 181
 <211> 189
 <212> DNA
 <213> Rattus norvegicus

<400> 181

aattccctcat tggatcatgt accgaaggcg ttcatctcca tggtaaagcc gtgcttcccg 60
 ttgctgtact cccattgtg tagctggatc atcctcatgt tcttctccca cactgctctc 120
 ctccactctt cctcattcgt gccatacagt cttctgtgtg tggacttcca ctggtgccac 180
 tgtgcatta 189

<210> 182
 <211> 160
 <212> DNA
 <213> Rattus norvegicus

<400> 182

aattcgggggt cctctgaaag ctaccacagg ttctcatctt ccctagagct tgtagtgtaa 60
 agtgacagct agtgtgtgcg cgcgtctctt cgtctctctt ccttctccct ctctctctcc 120
 ctattccctc ccctcctctc ctctgcccc tcttggttta 160

<210> 183
 <211> 287
 <212> DNA
 <213> Rattus norvegicus

SO_3170 US

<223> unsure at all n locations
<400> 183

aattcgggggt gaagnagaag ccgatataca tcaatgtcgt cagggaccga ttgagaggct 60
agtttcttac tattactttc tgagggttgg agatgattac agnccgggac taaggaggcg 120
gacacaagga gacaagaaga ccttcgatga atgcgtggct gaggcggctc agactgtgct 180
ccagagaagc tctggcttca gatcccggtc ttctgtggcc actagctcag aatgctggaa 240
tgttgggaagc agatggggcga tggatcaagc taagtacanc ctgggtta 287

<210> 184
<211> 135
<212> DNA
<213> Rattus norvegicus

<400> 184
aattcgtcaa agcagcacca ggcccccgac tgtgccaaac cactgaagaa ggcgcccatc 60
atctgaaagg caagcaaagc tgatcaactt caggctgect tgttggtcat ctctaactt 120
cataatctag agtta 135

<210> 185
<211> 79
<212> DNA
<213> Rattus norvegicus

<400> 185
aattcgacag tgtcccatgc agacattact aattgattct gttcttatta tggaaccttt 60
tggctggcca ggtgtgtta 79

<210> 186
<211> 413
<212> DNA
<213> Rattus norvegicus

<400> 186
aattcgtagg aagcttcaaa accaaacaag acttcataga tttgattgaa gtcacttacc 60
ggggagctat gcgaggaaaa cttattgttc aaagtctat tgaccccaag aacataccca 120
aatacgacct cctctatcaa gacatttagc actcgtgct gttggagaga agagaggcac 180
aggctgaagc agaacctgaa ctcagagagc ctgtggtctg gagtcctca gagacatgct 240

SO_3170 US

cactgcctga gcaaagaggt ttcataaggtc tgtaatcaac ggccccctctg cagaagcccc 300
 agtgctccca gaatggagat gcttgagcgc ccattctctg agagcctcag agcagtgage 360
 gagtgacagg tggcattgta acggaccctt tatcttgact gtctttcccc tta 413

<210> 187
 <211> 362
 <212> DNA
 <213> Rattus norvegicus
 <223> unsure at all n locations
 <400> 187

aattcgggca gggcatcatg gtccataaac atgaggggat gaaggctctt gtgcccactg 60
 gcttttcagc cttcccttcc gagctactgc atgccccaga aaagtgggtg aaggtaagt 120
 cccaaaactc atctcctatt cctacatgga acgtgggggc cnccttgctg cctttgaaga 180
 gcccaagctt ctggcccagg acatccgcaa gtccgggtcc ctggctgagc tgcagttagt 240
 aactgggata ccaactgtgg ctttagcagc agcctgggtt cctcccaagt cacacttatg 300
 gaagatgacc cctttctnag gaataagttt gtccctgac cacactcgag gaccagact 360
 ta 362

<210> 188
 <211> 74
 <212> DNA
 <213> Rattus norvegicus
 <400> 188

aattcggggc tgtttcagat ttccataact ctgattggta ggtgtgtcca tctggacagt 60
 ttattctagc ctta 74

<210> 189
 <211> 267
 <212> DNA
 <213> Rattus norvegicus
 <223> unsure at all n locations
 <400> 189

aattcggggg gccgttgggc ttcacggcga tgctgaccc gctgctgcc accatgttcc 60
 acctgcttct ggcgccccgc tcgggtccgg cgcgcctcct ggccctacca gcctatctgc 120

SO_3170 US

ctgggctgga ggagctgtgg agcccacggg ctctgctgct gttgttcac tggtcggcc 180
 tgcagggtggc gctctatttg ctgcctgcac gcaagggtggc cgaggggctg ganctgaagg 240
 acaagagtcg cctgcgctac cctatta 267

<210> 190
 <211> 192
 <212> DNA
 <213> Rattus norvegicus

<400> 190

aattctaaac atatgccatt gtggaagaag caaagccacg gagatagcag gccagtgcag 60
 attcactgat gtgacaactg cattctctca ggtaggaca ttggtggaag gagcctctgc 120
 acttatgggc tgtgtagcta tgggaacctt gtaacttctg ccaattttgc tctgaaactc 180
 aaactgcctt ta 192

<210> 191
 <211> 83
 <212> DNA
 <213> Rattus norvegicus

<400> 191

aattctagat ttcttggtaa actatcaaat ctgtatatgt atgtaataaa gtgtctaagt 60
 ctaggagttt attggaaggt tta 83

<210> 192
 <211> 56
 <212> DNA
 <213> Rattus norvegicus

<400> 192

aattctcaga aactatataa tacattctgc tgttggccaa tgcaaagtgt acttta 56

<210> 193
 <211> 42
 <212> DNA
 <213> Rattus norvegicus

<400> 193

aattcttcag aaatgtggtg tctaagaaca ccagaccctt ta 42

<210> 194
 <211> 133
 <212> DNA
 <213> Rattus norvegicus

<400> 194

aattctatgc attgatttac atgtactgaa ccatacttct ttgactgtaa tggagccaac 60
 ttgtggtaaa tggttatttt catatgttct tgacttgata tgaaatattt tactataaac 120
 ttttcatatg tta 133

<210> 195
 <211> 79
 <212> DNA
 <213> Rattus norvegicus

<400> 195

aattctgacc acatgagctt cctagacaga gtgaagaata tgctttatcc tgtgccatgg 60
 atgtatttat gccatgtta 79

<210> 196
 <211> 65
 <212> DNA
 <213> Rattus norvegicus

<400> 196

aattctcctt gtagtagcgt tgggaggaga caatggttcc tgtcgtccag tagatcatga 60
 tgtta 65

<210> 197
 <211> 64
 <212> DNA
 <213> Rattus norvegicus

<400> 197

aattcttcag aaggatgtg aagctatttg catatgtaaa taaactgcta agattgtcat 60
 gtta 64

<210> 198
 <211> 41

SO_3170 US

<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 198

aattctgcga nnaagttcaa atacaatagt gctggcagtt a 41

<210> 199
<211> 36
<212> DNA
<213> Rattus norvegicus

<400> 199

aattctgcaa attgccttac agactagcca tactta 36

<210> 200
<211> 218
<212> DNA
<213> Rattus norvegicus

<400> 200

aattctctac catctgttac aggctgtggg atgtcagagg aaggaacggg gtttggtggt 60

ggtaccacagg gcaggaccga gcagcaggat tcccgaaga gaaaggaggc agatgggcct 120

ttcaagagct ttaggaagcg actaacagca gagtgtcttg gaacatacga atcagtcctt 180

tgcatattgt aataaaccaa acacaagact cgccatta 218

<210> 201
<211> 151
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 201

aattcagcct gaggaggaaa tcagtctatg gtntacttgc tectgectct tagcttctgt 60

acctgcttgt cacatttgca cctatgagtc aagacatgtt tgttaccttt attttgattt 120

atttctatta caattcaatt tttttccttt a 151

<210> 202
<211> 63
<212> DNA
<213> Rattus norvegicus

SO_3170 US

<400> 202

aattcagtca cggactttat gcctttgaaa gttgtcacca ttttattgtc accctccatc 60
tta 63

<210> 203

<211> 221

<212> DNA

<213> Rattus norvegicus

<223> unsure at all n locations

<400> 203

aattcctctt atcaactgca tacaaagtgt ntccaataca attttttccg tataaaaata 60
ctgggaaaaa ttgataaata acaggtaaga gaaagatatt tctaggcaat taggattggt 120
gggacagtga gtcctgtggg gtgtttggac acagccacag gacaggcctc ctgacagtgc 180
tgcagatcag acggcaaaag aaagcagaac tgtctgggtt a 221

<210> 204

<211> 178

<212> DNA

<213> Rattus norvegicus

<400> 204

aattcctcca tcattgcaga ccggattgca ctcaagctgg ttggccctga gggctttgta 60
gtgacagaag caggattcgg agcagacata ggaatggaaa agttcttcaa catcaagtgc 120
cggattcttg gtctccagcc tcatgtggtg gttcttggtg ccaactgtcag ggctctta 178

<210> 205

<211> 233

<212> DNA

<213> Rattus norvegicus

<400> 205

aattccagaa gaaaaaggca ggatcacagt cctagtgggg aagetgcttc ctggtccacc 60
cgaagacacc aagttcaacc accgtccatc cagaaatgag aagaacaata cctagagca 120
aagtcatcca caccagtag acactccgct gctaacctga aatgcatgaa cagaaacca 180
tagtatttat gcccctctag gcagggtgac acaataaaat tgtgagcagc tta 233

SO_3170 US

<210> 206
 <211> 74
 <212> DNA
 <213> Rattus norvegicus

<223> unsure at all n locations
 <400> 206

aattcggaag gaactctcca acnnctcggt cagggagata tagccgcttt ctatctaaaa 60
 gactcattac tttta 74

<210> 207
 <211> 54
 <212> DNA
 <213> Rattus norvegicus

<400> 207

aattctccag ataatgggtca ttaagacaat tctttccagc atgctcaagg gtta 54

<210> 208
 <211> 240
 <212> DNA
 <213> Rattus norvegicus

<223> unsure at all n locations
 <400> 208

aattcacggg aaatgncttg tgcttagcat ggagaagaag gaagtggaag ggaatgggga 60
 tcaaactcct ctaacattgc aatatgctaa tattgttaga ctgctacaga tgcactgaaa 120
 cacagaatat gatcttttaa ggggccaaaa atgctacggt gtgaaaatat cacaatgact 180
 gtctttncct taaaaaagtc acataaaatg cagtttagaa caaggngaaa cataggtcta 240

<210> 209
 <211> 147
 <212> DNA
 <213> Rattus norvegicus

<223> unsure at all n locations
 <400> 209

aattcagggt atgnnnngtg gntataaagt acatttctgt agtgtgtgtg ctaccttagt 60
 ttnatgttct ttatgaaaaa ttaaaaacct cccctccac aactttctct ttgctttgaa 120
 tataggttag atcataacat ctatcta 147

<210> 210
 <211> 67
 <212> DNA
 <213> Rattus norvegicus

<223> unsure at all n locations
 <400> 210

aattcatgga aaacnnntat gttattttta atacataatg ttcaaaataa nnatatgttc 60
 tactcta 67

<210> 211
 <211> 41
 <212> DNA
 <213> Rattus norvegicus

<400> 211

aattcattct gtttttttaa tctaactttt atatcaatct a 41

<210> 212
 <211> 99
 <212> DNA
 <213> Rattus norvegicus

<223> unsure at all n locations
 <400> 212

aattcatctc ctcngaaag caaagttatg actattcttt ttcacagatc aaattacaag 60
 gggactaata gtgatgtaat ggnacccatg ccttgccta 99

<210> 213
 <211> 141
 <212> DNA
 <213> Rattus norvegicus

<223> unsure at all n locations
 <400> 213

aattccatgt ctatggnttc caagtengna gagaancaen nggatgactg ccaggaggac 60
 ccagggtttcc agtgtgagag ctgaaancag gtccatccct gcttgtctgt cancaaatta 120
 ctctcgggtg ttctccctct a 141

<210> 214

SO_3170 US

<211> 134
 <212> DNA
 <213> Rattus norvegicus

<400> 214

aattcctcca ccatttaatt cagctccaat caattttcaa tattgtctac actgttcctt 60
 gcaaaccat acccatraag atttatgact attcctocta cctgttttcg cttgtgtgtgc 120
 cacgtgctaa tcta 134

<210> 215
 <211> 121
 <212> DNA
 <213> Rattus norvegicus

<223> unsure at all n locations
 <400> 215

aattccccga cccagagata ttgaccctg gccacttttt agatgggaat ggaaagttaa 60
 agaaaagtga ctatttcatg cttttctcag caggaaaacg gatgtnnacg ganaggggtct 120
 a 121

<210> 216
 <211> 254
 <212> DNA
 <213> Rattus norvegicus

<223> unsure at all n locations
 <400> 216

aattccgtaa agaaataata ttctccttca aaaagaggct ggcccgattc caccgaagga 60
 aagagatgga aaaaaacaaa caaaccatcc tgaagtcagc ttctccatgt actgtcacaa 120
 tgagagactc aattgcctcg tgagtgtggt ggagggagga aaaaggggtc atacctgcct 180
 cattaggaag agcagaacta tgggtaagan cacagtggac tggatgttac actcantnnn 240
 ccacttaata gcta 254

<210> 217
 <211> 107
 <212> DNA
 <213> Rattus norvegicus

<223> unsure at all n locations
 <400> 217

SO_3170 US

aattccgunc cgaacaaggc cacangtgan ncttactgga ntccatgctg ccattttttt 60
gtctgaaaat gtcagtactt aaaagtattt aggnaacact cgagcta 107

<210> 218
<211> 37
<212> DNA
<213> Rattus norvegicus

<400> 218

aattccttgg tattcggtat cagtaggaat ggggcta 37

<210> 219
<211> 291
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 219

aattcctgac cantgnnggt ctgganaaga ncccagagga gatccaacgc ctgtncagg 60
anaagaagggt ggacntgtcc aagcccttgg taagccacat gcggctccgg tgtcacagcc 120
tgccacgtgg tcctgggggc ctctctctgt ggcaaaccgc atgtgcctgt ctacgatggc 180
tcctgggtgg agtggtacat gcgtgcccac cggagcacg tcatntntca gggccggggg 240
aagaccctgt gaangacaca gtgcagcttg ggtgacaccg gaaccatcct a 291

<210> 220
<211> 289
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 220

aattcctgga aaaagacata tcagaggaan ttcttaataa aatcatctac cacacctcct 60
ttgatgtaat gaaggaaaac ccaatggcca actataccac tctaccctcc agtatcatgg 120
accactctat atctcctttc atgaggaaag ggatgcctgg agactggaan aactacttta 180
ctgtggcaca aagtgaggat tttgatgaag actaccggag gaagatggca gggagcaata 240
ttaccctccg cacagagatc tgagagcagt gaggnagagg ganncccta 289

SO_3170 US

<210> 221
 <211> 91
 <212> DNA
 <213> Rattus norvegicus

<223> unsure at all n locations
 <400> 221

aattccaggc cagctnntca antaagatcc tatcttaaag tanaatgaaa taggggtggg 60
 gatttagcta cantgmnana gcaattgcct a 91

<210> 222
 <211> 166
 <212> DNA
 <213> Rattus norvegicus

<223> unsure at all n locations
 <400> 222

aattcccaaa acctnnnacg aagtctccgg antgagtcaa ctataccgct ttcttggcat 60
 gagtccagag gcctccgact ccacagagan cagctcagtn ttcgtcttta ctgcgctaca 120
 cgtagaagag ctaagaaatg gagccggttn ncagaccccn ggacta 166

<210> 223
 <211> 112
 <212> DNA
 <213> Rattus norvegicus

<223> unsure at all n locations
 <400> 223

aattccagan tcagcaccaa nngacagacc attctaaaat gggcaaagga ctgaacggat 60
 gntccggatt gacagtgacc acacagccca tganganccc acaggaccac ta 112

<210> 224
 <211> 65
 <212> DNA
 <213> Rattus norvegicus

<223> unsure at all n locations
 <400> 224

aattcgtaaa gaggannctc acnntgaaaa cataaactgc cacagtaagn ncacaaacct 60
 gtcta 65

SO_3170 US

<210> 225
 <211> 44
 <212> DNA
 <213> Rattus norvegicus

<223> unsure at all n locations
 <400> 225

aattcgccaa qaqcqtttga ntgacagctc tttgtgtatg tcta 44

<210> 226
 <211> 105
 <212> DNA
 <213> Rattus norvegicus

<223> unsure at all n locations
 <400> 226

aattcgatgt gggnnccata naaagtangg aaaaatatgg ggttgtntga tgggtcaaag 60

cctctgtttg ccatcacnga cacagaaatg ancaagaatg tgcta 105

<210> 227
 <211> 110
 <212> DNA
 <213> Rattus norvegicus

<223> unsure at all n locations
 <400> 227

aattcgagac ccaanncacn aaccnaaacc cacaaccaca acagtaacna gaacaagaag 60

aaagaaagca aaaggggttg gatttagntc agtgggnagag cgcttgcta 110

<210> 228
 <211> 392
 <212> DNA
 <213> Rattus norvegicus

<223> unsure at all n locations
 <400> 228

aattcgggag tgnngnncct tctgantctt gcancaaaga ggctnttcta tagcatgnnc 60

nangatgctg gcttggtgtg aacnnatctc tggcatatct gatgangatg cangnccagg 120

atcccantgt ccangnatga nccagcaacc ctggaaacct aactcccca gagaaaaacc 180

anaaattgaa agaanancaa actaaaagga ngcnaaacac ataaagcatc antcacagtt 240

tgnnccagcc tngatctgac ntcgaanaag cctgaagaca gatgtgcccc ncttcanaca 300

SO_3170 US

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caanncaang nnatgagnnc ccnaacacac ta 392

<210> 229
<211> 81
<212> DNA
<213> Rattus norvegicus

<400> 229

aattcggaag gactctccaa tgctgttcag ggagatatag ccgctttcta tctaagaaca 60
tcattacttt aacaagtact a 81

<210> 230
<211> 203
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 230

aattctggac caagactctg cccagaaga tccaagagct aaagggttct caggacaatc 60
acacagagct ataatgtcct gtgtcaagaa aactgtgtag acttgangta cagggtttct 120
gaagcctcta aagtctacac ttgaatggat atatcacatc tgttgatga ccctgcaatt 180
aaggttgaag tcgaccatgt cta 203

<210> 231
<211> 110
<212> DNA
<213> Rattus norvegicus

<400> 231

aattctgctc tgtgtatcct gatccaccaa gcagtcactt ggtagcagaa aagtggctct 60
atgtctgctc ttaactgtgg tggcgcttct gggactgtct tccagctcta 110

<210> 232
<211> 252
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 232

SO_3170 US

aattctggaa taaganncct gtttttaaaa aaggaactgc cgcaatctga aagacttcca 60
aagaangtta gagcacagta catactaccc ctgccctgct cccaccaccc gctctccaca 120
accctcccc atgtgcaact gacactcctc cccagtcgat gctcctacct acctttcagc 180
ccacgtcatt cgtagtgtec atcttgtnaa gccctgttgt gccacacagt ntaacnngcc 240
cccctgcagc ta 252

<210> 233
<211> 120
<212> DNA
<213> Rattus norvegicus
<223> unsure at all n locations
<400> 233

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gggaggccag tttccatccg cactgaattg gggagaanaa aactgggnccc aattacgcta 120

<210> 234
<211> 47
<212> DNA
<213> Rattus norvegicus
<400> 234

aattctaagc cgagtttaac atgttcaaga tatctcogtt tcagcta 47

<210> 235
<211> 121
<212> DNA
<213> Rattus norvegicus
<223> unsure at all n locations
<400> 235

aattctccga cccgggnata ttgaccctg gccacttttt agatgggaat ggaaagttta 60
agaaaagtga ctatttcatg cttttctcag caggaaaacg gatgtgtnca ggagaggcct 120
a 121

<210> 236
<211> 65
<212> DNA
<213> Rattus norvegicus

SO_3170 US

<400> 236

aattcatcca caccaactgg acatgccac ggtggcagtg tgtcgtcctc ttcatacaat 60

gccta 65

<210> 237

<211> 49

<212> DNA

<213> Rattus norvegicus

<400> 237

aattccctac acagaccaga actggctttt aactctacca ctacgtcta 49

<210> 238

<211> 48

<212> DNA

<213> Rattus norvegicus

<400> 238

aattccctgg gtgcctttct ttacaaaatg ggttcaataa ataagcta 48

<210> 239

<211> 74

<212> DNA

<213> Rattus norvegicus

<400> 239

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taaaacttcc ccta 74

<210> 240

<211> 142

<212> DNA

<213> Rattus norvegicus

<223> unsure at all n locations

<400> 240

aattccaggc tgggnnttggc tttctctgct ttcattgacct cttgacccca acgagctgat 60

gttaggacca caacactggg aggtgggttaa aaaacaagca acaagggctg gggatttagc 120

tcagtggtag agcgcttacc ta 142

SO_3170 US

<210> 241
 <211> 184
 <212> DNA
 <213> Rattus norvegicus

<400> 241

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 tgaatctctt caccagcacc cctctggcca caggcaaagt atgccacagg cctctgacat 120
 actttggaca gactgccagc taacacccac ccccccatg ttaagacaca tctctggatc 180
 ccta 184

<210> 242
 <211> 71
 <212> DNA
 <213> Rattus norvegicus

<400> 242

aattccaag gtcaaatgcg gttagctgct gtggacttcg atatggaaca tgttacctct 60
 ccctttgcct a 71

<210> 243
 <211> 391
 <212> DNA
 <213> Rattus norvegicus

<400> 243

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 tctataccaa ttttatcaac tcttaagccc aactatcacc accattctcg caatttcato 120
 agtctttggt ggcgctgag gaggacttaa ccagacccaa acacgaaaaa tcatagcata 180
 ttcatcaatt gccacatag gatgaataac agcaatcctt ccatacaacc ctaacttaac 240
 cctcctaacc ttaacaattt acatcctact tactgttcca atattcatca cactcataac 300
 aaactcagca acaacaatca acacactctc actcgcatga aataaaaactc ccataatcct 360
 aaccatagca tccatcctcc tcttatcact a 391

<210> 244
 <211> 175
 <212> DNA

SO_3170 US

<213> Rattus norvegicus

<400> 244

aattcgccct gtcgggatga gagagtggga gactgagtaa ccatggctcc gccgtgccct 60
 cactggctct tttccgtgta gcatctctgg gcaagtgagg gaggcattatt agtttccatt 120
 tqcaqqtqtq gaacactgag cccagaaaag gacaagaaga ctcatcagc agcta 175

<210> 245

<211> 194

<212> DNA

<213> Rattus norvegicus

<400> 245

aattcgccaa ggatgactcc gatagcatga gccgaagaca gacttcttat tctaacaacc 60
 ggagcccaac gaacagcact gggatgtgga aggactcgcc caaatcttcc aaatccatca 120
 gattcattcc tgtctccact tgagccccac gtacacgcag cccgactctt gggagggact 180
 tttgtgtcca gcta 194

<210> 246

<211> 44

<212> DNA

<213> Rattus norvegicus

<223> unsure at all n locations

<400> 246

aattcgggct ggggatttag ctcaagtggan aaacgcttgg ccta 44

<210> 247

<211> 198

<212> DNA

<213> Rattus norvegicus

<400> 247

aattctggag atgggacacg aggatcagtt caaggtcatc cttagctact cactgcatag 60
 taagtttgag gtctgcctgt gctacatgag accgagggag agaaaggagg ggaaggagtc 120
 aagcggtagt tgctttaa cgcagcattt gggagggcaga ggcaggtgga tctctcggtt 180
 tgaggccagc ctggtcta 198

SO_3170 US

<210> 248
 <211> 332
 <212> DNA
 <213> Rattus norvegicus

<400> 248

gatccgccac tccttctgca tacatgtcga tgagggctct ctccttcacg tccttcccat 60
 agagggttgta tttggtggca atgtagttga gaatggctct ggtctgcacc agcttcaccc 120
 catcaatctc caccatgggc acttgctgga acatcaaact cccatcattc cttagcctgg 180
 ccaggtcatc ccgagttttc agaaattggt cttcaaactc tactccagct gcagccagga 240
 gccaccggat gggctccatt cccccctgc catcgaagta gtgaaggact ggcttccccg 300
 gcatggcagc aattgcttga gttctcttgt ta 332

<210> 249
 <211> 481
 <212> DNA
 <213> Rattus norvegicus

<223> unsure at all n locations
 <400> 249

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 gcacaaagtg aggaagtggc cctgggaggg gggggggcgg ggcagctccg agctcaggca 120
 gtagggcact catggtacca tgaggggtggc cagtctgcag gaggcattga gtgaaggcca 180
 gtgctggctc cacttgggaa gaaagggtt acagagcccc ggagtccgag gcagttggtc 240
 tctgccancc atggcgatc caagcctcct atccattccc cctgtacctc tggagatagc 300
 ctgtccataa gatggctgtc ctgcctact ggggccactt gaagaacaaa atgtcatttt 360
 attctcttga gaaaagaaaa agagggaatc atttttgccc ctgcttggat gcctagaagt 420
 ctaataagcc tcattacaaa aagacgtttt ctgggtctca tctggcgttt tctttggctt 480
 a 481

<210> 250
 <211> 441
 <212> DNA
 <213> Rattus norvegicus

<400> 250

SO_3170 US

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 accatcgact tccgtaggct tctcagcaac ttggaattgt tcttgatctt caggtttggt 120
 gaccaccatg tgcgtgagag gaggacaaa attgtacttg agtgacaagt tcagaacttg 180
 ggctcgagg gcctctaact cagctcctga ggctgaaatc ctctgctcca gctgttgctg 240
 tatggtcagc aacgcccaga gtctctccat aaagttatga aagatgtact taggacctg 300
 gaactctttc tcttgttggg ctatgctggc ctccgtttgg aaagtgatgt tctgcaggtg 360
 catctgcccc ctgacttttg ctaagaggac atcaggggccc tggteccgga cttcccagcc 420
 accaccatct ctgagccctt a 441

<210> 251
 <211> 193
 <212> DNA
 <213> Rattus norvegicus

<400> 251
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 atgtttgggt gtcttggagc aaagctgcta tggagaaatg tgcaggtgcc taggggatgc 120
 tgtactgctc tagaggatgt aactcaactc acagggtgac tttttgatgc ctgacccaat 180
 tactagttga tta 193

<210> 252
 <211> 156
 <212> DNA
 <213> Rattus norvegicus

<223> unsure at all n locations
 <400> 252

gatcctggga ggatgttgac cacacccttg ggaatgccag ccttcagtgt cagctcggca 60
 aacttcaagg ntgtgagtgg ggtcacctgg gcaggettga tcaccacggg gtteccagcc 120
 gccaggcagg ctgcatcttc caggatacca tcatta 156

<210> 253
 <211> 101
 <212> DNA
 <213> Rattus norvegicus

<223> unsure at all n locations

SO_3170 US

<400> 253

gatccgaacc caagaggtaa aaaccttccc gcgcgaccag aagtgtccga ggctttccc 60
gaggcggtgg gacttacttt cccaagaana aagcaggatt a 101

<210> 254

<211> 228

<212> DNA

<213> Rattus norvegicus

<400> 254

gatctgcacc gttttgaagg aggaattcta ccacagctat ttgcccggtgt gccgcagccc 60
acatcagggg agtaaactct tcttcacccg tgtgattgat aacattttct tgttcaatac 120
gagtagccag gtagagcacc tctccctgag ctgccaaactg gtgaacagac agagaatttg 180
ctaacagagg tgtgggtggag acctcgtttc cctgtgtgtt gttgggta 228

<210> 255

<211> 177

<212> DNA

<213> Rattus norvegicus

<400> 255

gatctttacg tgggtggctct ttaggtagtg gacttttatt tactcccaag ggcatcattt 60
caaactctcc cctctctggg gaaagttcag attccacagc aggtgctgat agtacaacca 120
tgtccatttc ataacaatat gtaggatgtt tgatcttcaa gttgggtgaat gctgtta 177

<210> 256

<211> 447

<212> DNA

<213> Rattus norvegicus

<400> 256

gatcttgggg tgtgggtagg gatttccagg gtgaaggtag attatttatt aggggtgggaa 60
tgtttcattt acatgaagag gaatatgcc agaacctgct ggacaagttc atatcctgaa 120
agaggaaglt gaactctgaa tctggccata agttatgtga ctttcctcag aggatttctg 180
gggttacagg caggagtggc tgattggtca taacagtacc taattatcat atgggtgggaa 240
ggactgagtg ggatgtatgt gctgaacctt gtggcacttg caggaagctt tgtgcaaggc 300

SO_3170 US

cattctctag ataaggtcag gcacttgtgc ttagaacact ttccagataa gattgggcaa 360
 aggagaggaa accccactga gaaagggagt cttccatttt gcaccagggt cagagagctt 420
 atctagacat ggtcgacttc aacctta 447

<210> 257
 <211> 350
 <212> DNA
 <213> Rattus norvegicus

<400> 257
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 agaggtcata tttgggtggcg atgtagttga gaatggctct ggtctgtgcc agcttcatcc 120
 cgtcaatctc caccatgggc acttgggtcaa acatcaaatt cccgtcttct tttagctttt 180
 ccaagtcttc tggactctgt ataaacttct cttcaaactc cactctgtct gcagccagga 240
 gccaccggat gcactccatt ctgccccggg cattgaagta gtgaagcact ggcttcccag 300
 acatagcagc aactgtgctt tcaactgtct gcgagaatcg tggcttctta 350

<210> 258
 <211> 155
 <212> DNA
 <213> Rattus norvegicus

<400> 258
 gatcttcacc attgggggtc ccagttcttg caaagttggc ccagtacttc atcaccctcc 60
 tcttcagcag ctctctctcc tcagtggagt caaaggctat gccccacaag taggagccaa 120
 agacaaagag aatgtcatca ccatgggtctg cctta 155

<210> 259
 <211> 37
 <212> DNA
 <213> Rattus norvegicus

<400> 259
 gatccgtacc ctaggtcaga gctgtgatct ctgctta 37

<210> 260
 <211> 40
 <212> DNA

SO_3170 US

<213> Rattus norvegicus

<223> unsure at all n locations

<400> 260

gatcctggng atcagtgtgg ggctcacctc caatgggtta 40

<210> 261

<211> 224

<212> DNA

<213> Rattus norvegicus

<223> unsure at all n locations

<400> 261

gatcctatgg gctccgtggg cagctagcct agccagcata nggagctcca ggttcagtga 60

gaagacttgt ctcaaaaata agagggaaaa agcaaatgag gttgtcacia atgtgtactc 120

gtcatacaaa tgccatccat gcaaatgtat acacacacac actcacacac tcacacacac 180

acacacacac acanacanac acacacacnc ncnataccc atta 224

<210> 262

<211> 31

<212> DNA

<213> Rattus norvegicus

<400> 262

gatcttgaaa agactgtttc cttcatgatt a 31

<210> 263

<211> 53

<212> DNA

<213> Rattus norvegicus

<400> 263

gatcttcgaa ctaaacgctg gggcgccac ctccgaatcc caatttctaa tta 53

<210> 264

<211> 63

<212> DNA

<213> Rattus norvegicus

<400> 264

gatcctaact cattagtgt aacgaccctc tccagcgtcc ctgcgcccac ctttctgtcc 60

SO_3170 US

tta

63

<210> 265
 <211> 105
 <212> DNA
 <213> Rattus norvegicus

<400> 265

gatcctattg aggcgagcag ggacctggct ggacaaggac acacttaaaa cccgattttg 60

ttccaaattc tgggaaacat agacatttaa ctctgaagat gccta 105

<210> 266
 <211> 66
 <212> DNA
 <213> Rattus norvegicus

<400> 266

gatctaaagg accaagcagt atgtcagtag ttgttaacgt agcagtagct gtctgtctgt 60

atgcta 56

<210> 267
 <211> 137
 <212> DNA
 <213> Rattus norvegicus

<400> 267

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aagcagaagc tgggcctgca tgtactcatc tacatcatgg aggccagtga catcaggagc 120

cccgtcacac actacta 137

<210> 268
 <211> 197
 <212> DNA
 <213> Rattus norvegicus

<223> unsure at all n locations

<400> 268

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gttcntcagg tcaactggat caggccccca tgtcctctaa ggagcaggaa gtcctcctac 180

SO_3170 US

ctaccctacc cacccta 197

<210> 269
 <211> 40
 <212> DNA
 <213> Rattus norvegicus

<400> 269

gatccgcctc tcccaggagc atcaagccta ccgctggcta 40

<210> 270
 <211> 109
 <212> DNA
 <213> Rattus norvegicus

<400> 270

gacccatttg gagctgggtga aatagggtcat tttcttatca agaaaaacaa cttctgaaga 60

cagggtttca cacatctcag gattggccat gaactcacta tgcagccta 109

<210> 271
 <211> 51
 <212> DNA
 <213> Rattus norvegicus

<400> 271

aattcacaag gaaggagctt agaacagaca tctatttctt actgattggt a 51

<210> 272
 <211> 36
 <212> DNA
 <213> Rattus norvegicus

<400> 272

aattctacag aaccgtgttt atgatacagc cgttta 36

<210> 273
 <211> 36
 <212> DNA
 <213> Rattus norvegicus

<400> 273

aattcagcct taggaaaaaa taaaattgct gcctta 36

SO_3170 US

<210> 274
 <211> 67
 <212> DNA
 <213> Rattus norvegicus

<400> 274

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 gatatta 67

<210> 275
 <211> 287
 <212> DNA
 <213> Rattus norvegicus

<223> unsure at all n locations
 <400> 275

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 cattggaaga ccttagagtc agaattctct tgtgtaagag ccttgaatgn tgtgaccaac 120
 cccagtgtct acagcatctt tgcagctggt aatctcactg ttctcggtcc tattgaagaa 180
 attactggcc cagaaatgcc tttggtgtgt ttggcagact ttaaggcaca tgcgcaaaag 240
 cagctgtcta agacctctg ggacttattg aaggagaagc tgacgac 287

<210> 276
 <211> 260
 <212> DNA
 <213> Rattus norvegicus

<400> 276

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 gctgctggac atggtcacga acacggacat ggtcatggta aaatggaact tccagattac 120
 agacagtgga aaattgaagg gacgccatta gaagcaatgc agaagaagct tgctgcacga 180
 gggctgaggg atccatgggc togcaatgag gcttggagat acatgggcgg cttgcagaca 240
 atatcacctt cagagcgta 260

<210> 277
 <211> 299
 <212> DNA

SO_3170 US

<213> Rattus norvegicus

<400> 277

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 ctgaaggaga tggcccagtc gatcttcatg gcaggcatac tgggtggagg acctgtgatt 120
 ggagaactgt cagacagggt tggccgcaag cctatcctga cctggagtta tctcatgctg 180
 gcagccagcg gctctgggtgc tgccttcagt cccagcctcc ctgtctatat gatcttccga 240
 ttctgtgtg gctgcagcat ctggggcatt tctctgagca ccgttatctt gaatgtgga 299

<210> 278

<211> 139

<212> DNA

<213> Rattus norvegicus

<223> unsure at all n locations

<400> 278

gngagatacc atgatcacga aggtgggttt cccagggcga ggcttatcca ttgcactccg 60
 gatgtgctga cccctgcgat tccccaaat gggggaaact cgactgcata atttgtggta 120
 gtgggggact gcgttcgcg 139

<210> 279

<211> 328

<212> DNA

<213> Rattus norvegicus

<223> unsure at all n locations

<400> 279

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 gctgggggaa gattggccat ggtggtgaat atggcgagga ggccctacag aggatgttcg 120
 ctgccttccc caccaccaag acctacttct ctacattga tgtaagcccc ggctctgccc 180
 aggtcaaggc tcacggcaag aagggtgctg atgccttggc caaagctgca gaccacgtcg 240
 aagacctgcc tgggtgccctg tccactctga ggcactgcac gccacaaact gcgtgtggat 300
 cctgtcantt cagttcctga gccatgct 328

<210> 280

<211> 312

<212> DNA

SO_3170 US

<213> Rattus norvegicus

<400> 280

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aaaaaaaaacct gtcactgtcc ttttcctgcg accatgtctt ccatcaagat tgaatgtgtt 120
traagggaga actacaggtg tggggagtc cctgtgtggg aggaggcacc aaagtgtctg 180
ctgtttgtag acatcccttc aaagactgtc tgccgatggg attcgatcag caatcgagtg 240
cagcgagttg gtgtagatgc cccagtcagt tcagtggcat tcgacagtca ggaggctatg 300
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<210> 281

<211> 289

<212> DNA

<213> Rattus norvegicus

<223> unsure at all n locations

<400> 281

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cattctccct agcctgcntc tcttgccccg naacgcgggg ngcaggtttg ctctaaaaan 120
ctctgtgcat cttcgatgat aaggaccaac agctgggggt gtagctcagg gcagagtctt 180
gcctggnaag cccggatgcn ttgaggcctt gaccaccnc agcacanana naaatgaag 240
gaagacccaa ggnaccttct ggaagacctc atccccaaan aagcaagtg 289

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<210> 282

<211> 250

<212> DNA

<213> Rattus norvegicus

<400> 282

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actgactgta ctggtcagga ggtcacagat ccagccaaat gcaacctgct ggcagaaaag 60
caatatggct tctgcaaggc gactctcacc cacagacttg gtggggaaga ggtttcagt 120
gcctgcgcct gtagccccac cagctggccc acctgaatcc gtggtggtag gaccctggc 180
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tgtggcttct 250

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SO_3170 US

<210> 283
 <211> 285
 <212> DNA
 <213> Rattus norvegicus

<223> unsure at all n locations
 <400> 283

agccactgtg ggcgatctcg cgcacgcnaa ctgctgtctg tngcacgtag tcccccatcg 60
 tgcannaanc ggtcncaaaa gattcnaann caagatggna gcccnacacg aacaggncat 120
 tgtgaatgtg cttaaggaag aacaggtncc ccanaacaan atnaaagttg ttgggggtgg 180
 tgtgntggca ngggttgtgc catcagnanc tcaangaang actgggtgat gagntgcccc 240
 ttgttgatgn cacacaagan aanctaaacn gagagangan cgatc 285

<210> 284
 <211> 266
 <212> DNA
 <213> Rattus norvegicus

<223> unsure at all n locations
 <400> 284

gaccctgtnt ccaggagcca acagctagac tggctccagt cagacgnagg aaacctggnc 60
 cagcttttgc actttcnang tgacgatggn cntacagagg acccaatcct tgcttctgct 120
 ctgttgctga ccctgctggg gttaggggtg tacagccctc ctatggccaa gatagaatgt 180
 accaacgggt ccttagacag catgtggacc ctgaggggac aggcggcagg acaactactg 240
 caacgtgatg atgcagagac ggaggt 266

<210> 285
 <211> 250
 <212> DNA
 <213> Rattus norvegicus

<400> 285

gtagctttcc ccttttctg gcacagaagt ctgtccatct gcaagcgctt tggaacacag 60
 actgcctgga gccaccttcc tttgggagac cttcctgcct cagctgtcgt cctgtgtcgt 120
 cattcactaa agctcctgac gtcagattaa gcaagcagt atgggttaca ttagagacaa 180
 gccgcagaga taaggcctgt tgctgtttcg cagataatga tgagttttaa ttaccactg 240
 gtttgatgg 250

<210> 286
 <211> 118
 <212> DNA
 <213> Rattus norvegicus

<223> unsure at all n locations
 <400> 286

gtangactng catcggcaag ggctacagag gaaccatgtn caagacaaag actggtgtta 60
 ccnntncaat agtggagtga gcacgtgccc cccacgtagc ccaaanactc ccccagge 118

<210> 287
 <211> 262
 <212> DNA
 <213> Rattus norvegicus

<223> unsure at all n locations
 <400> 287

gagagnacct ttgtctcgga gtaactcccg taccccaagt cctaaaagcc ttccgtctta 60
 cctcaatggg gtcattgcctc caacacagag ctttgcccc gacccaagt atgtcagcag 120
 caaagccctg cagaganaga gcagcgaagg gtctgccaaag gcccctgca tcttgcccat 180
 ncattgagaa tgggaagaag gtcagctcca gcnttattca cctactacct gagcggacgg 240
 cancaccttg ncaaatatga gc 262

<210> 288
 <211> 282
 <212> DNA
 <213> Rattus norvegicus

<223> unsure at all n locations
 <400> 288

tgagctgcnc ctgacatttg tccatctccc aaannctctc tggagcance ntngaagtcc 60
 ctngtctctg tcccttnnnt tgctcagatt ctagagctgc caatcagctc cacaaggtgc 120
 agggctgggt tttcgagaat tggcttnnat gacccggaag aaaancntt nanctttgat 180
 agccgtggac tacctcaata aacatcttct tcagggatcc aggcagatct tgaatcagat 240
 gacaaagtaa ggtgtggtct cggcgccctc tcgganaggt gt 282

<210> 289

SO_3170 US

<211> 265
 <212> DNA
 <213> Rattus norvegicus

<400> 289

catagaccca tctctcagct gggatgatat taaatggctc agacgggtga cctcactgcc 60
 cattgttgtta aaggggaattt tgagaggtga tgatgccag gaagctgtta aacatgggtgt 120
 ggatgggatc ttagtgtcga atcatggggc acgacaactg gatgggggtgc cagctactat 180
 tgatgccctg ccagagatcg ttgaggctgt ggaaggggaag gtagaagtct tcctggatgg 240
 gggagtcagg aaaggcaccg atgtt 265

<210> 290
 <211> 199
 <212> DNA
 <213> Rattus norvegicus

<223> unsure at all n locations
 <400> 290

ccctgcaagc tgtgttgcag ggcccgaag gctcactgtt ccgaaatggc cgacagtcag 60
 acaaggatgt gagatacact ctggagagat cagagacaag cacaganact gtgtcncact 120
 agtgncttg cagtctnaac atctgtggag atcnanncan tggtnanntna ctggcncgan 180
 ncgtncnatg caaannacg 199

<210> 291
 <211> 285
 <212> DNA
 <213> Rattus norvegicus

<223> unsure at all n locations
 <400> 291

tacgcaccat ggacacangc acangcctca tcagancat gcatagtagt ntaaatacana 60
 agtgtgatct tgttcaacta cagttatgga gaagcaactc attggccagn ttctgggaga 120
 ntttgtgnng tanttaatgc agcngtatgg naacnnaata cnatttangt ttcnggtgct 180
 gntantaatg gtcnatgect tetacagtgg gttgtccann nggantactt ccancggnat 240
 aggnngntgga gcntatgttc tcgccgatat ganggttgcg nggta 285

<210> 292

SO_3170 US

<211> 268
 <212> DNA
 <213> Rattus norvegicus

<223> unsure at all n locations
 <400> 292

ccacgctgga gcgaanacca ttgctcgtga gcacatgggg agactgctgc accagctact 60
 ctgcgagagg cactctctta ctgtccagta ctaccaaggg ctgtatgaaa cactagaatt 120
 ggctgaggac atggaaatcg acatccctca tgtatggctt tacctggcag aactgataac 180
 acctattctt caggaagacg gggtagccat gggagagctc tttagggaaa ttacgaagcc 240
 tctgagaccc atgggcaaag ccacttct 268

<210> 293
 <211> 185
 <212> DNA
 <213> Rattus norvegicus

<223> unsure at all n locations
 <400> 293

ctcattgcca ccatgaactt ctccggcaag taccaagtgc agagccaaga gaactttgag 60
 cccttcatga agggcgatgg gtctgctgag gacttcatcc nagaaagga aggaantcaa 120
 gggggtnnnn gaatnngcn nnnanggaag aaantnnaac tcnccatcan ctanngncc 180
 aangt 185

<210> 294
 <211> 186
 <212> DNA
 <213> Rattus norvegicus

<223> unsure at all n locations
 <400> 294

agctaagtag aaaaatatgt gtgaataaag ccaataatat ctcccanatg ttattaccaa 60
 ttaataagat gttctatctt ctggtatgat ataaaattat ctctacttaa tgtcataact 120
 ggcaaaaaaa aaactatcat tgcaaatgcc tccagtgaa accaataact tctcanatat 180
 ttagaattat tggttataac tcaactaacct agtttcttaa natcanttta anatttgatt 240
 tatngtanag cantggnaa tgatgccnct ctnatgttgt ttnnac 286

SO_3170 US

<210> 295
 <211> 225
 <212> DNA
 <213> Rattus norvegicus

<400> 295

gcctccccggc ttgcctgccc agttttatcc ctagaagcag ctagctactc caggtgcaca 60
 ggtgccatgc agccccgaat gctcctcatc gtggccctcg tggctctcct ggctctgccc 120
 cgagctgatg agggagaggg atccttgctg ctgggctcta tgcagggcta catggaacaa 180
 gcctccaaga cgggtccagga tgcactaagc agcatgcagg agtct 225

<210> 296
 <211> 278
 <212> DNA
 <213> Rattus norvegicus

<223> unsure at all n locations
 <400> 296

acaccatcna cctgtatgcn gtnactggcc gtgnggacat tccagccagc agcaagccat 60
 ntccatcaa ntatcanaca naaattgaca agccatccca natgcangtg acgngtgtcc 120
 aggacaacag catcagtgtc aggtggctgc cttcaattct nctgtggaca ggtaccgagg 180
 nccagcgggt cccnaaaant gggactgac naacanaatc tcaaactgtc nagtccagat 240
 canacagaga tgnccattga aggntgcaac ccaccgtg 278

<210> 297
 <211> 290
 <212> DNA
 <213> Rattus norvegicus

<223> unsure at all n locations
 <400> 297

gtggaaagga aacctcattg ccaccatgaa cttctccggc aagtaccaag tgcagagcca 60
 agagaagttc gaggtggana ggaaacctca ttgccaccat gaacttctcc ggcaagtacc 120
 aagtgcagag ccaagagaac tttagccct tcatgaaggn nannggngctg nctnaggngt 180
 tcatnengaa angganggnc atcaaggggg tgtcagntat nctgcatgan ggganctent 240
 caaatnanca ncactatgng tncaagtgat cnaatgagtt cacttggggc 290

SO_3170 US

<210> 298
 <211> 296
 <212> DNA
 <213> Rattus norvegicus

<223> unsure at all n locations
 <400> 298

agcaagccta tttctgactg gnetgctgtg cagaatctag accactggca gtgggtgaca 60
 gccagttga ggttaatcga agtctctgctg caggctctgc tgtaagtctg gcctcttgcc 120
 ctcacatctt ctttgtggga tcttcccta tctccagctt cctcagctgg tcaggagat 180
 ttggtccaga actagaagcc ttaataatct gagcaggtaa gagaggagta aaatgtacag 240
 tcttggacat tgactaaagg gtcttcgaga ggatatcaag gtaagtggct tggagg 296

<210> 299
 <211> 277
 <212> DNA
 <213> Rattus norvegicus

<223> unsure at all n locations
 <400> 299

ggtggccctg ccttgtcttg gctctgctct ctggcttgga gacctctggc tttccaagga 60
 gtccctccg gctgcttggg aaacggagcc ttccagaagg ggtggtggat gcattgagat 120
 ctacagcacc aagatcagct gcaagggtgac ctcccgctt gctcacaatg ttgtcaccac 180
 aagggctgtc aaccgtgcag acaaggccaa gaagtcttct ttgatgtgga ctgccaaga 240
 cagcctncat caccaacttc accttgatat ngatggg 277

<210> 300
 <211> 287
 <212> DNA
 <213> Rattus norvegicus

<400> 300

ctcagtttct gaagagaagc accctggcac agttcttctg agttttggac ctaggtctac 60
 aaccatgaag gtagcaatta tctttcttct cagtggcttt ggccctgctc aatttagcag 120
 gtaacactac agctaagggtg attgggaaaa aggctaattg ccctaataca cttgttggat 180
 gccccaggga ttatgatcct gtgtgtggta ctgacggaaa aacttacgcc aatgaatgca 240
 ttctatgctt tgaaaacagg aaatttggaa catctatccg cattcag 287

<210> 301
 <211> 85
 <212> DNA
 <213> Rattus norvegicus

 <223> unsure at all n locations
 <400> 301

tttcttctga cgctaggnaa cattccagt tagctgaggc tgtcccaaac ccagtgaggn 60
 gccaggatg ttcctgaaaag ggctg 85

<210> 302
 <211> 295
 <212> DNA
 <213> Rattus norvegicus

 <223> unsure at all n locations
 <400> 302

gcgacacagg tgaacatnt ctntgacgc taggaaacat ccagtgtagc tgaggctgtc 60
 ccaaccagc gagggagcca ggatgtncn gaaggctgtg gtgctgaccg tggccctggc 120
 ggccatcacc gggaccacagg ctgaggtcac ttccgaccng gtggccaatg tgatgtggga 180
 ctacttcacc cagcnaagca acaatgccaa ggaggctgtg gaacaactgc agaagacaga 240
 gtgcactcaa cagctcaata cccctctcca ggacaaactt ggaacattaa cacct 295

<210> 303
 <211> 279
 <212> DNA
 <213> Rattus norvegicus

 <223> unsure at all n locations
 <400> 303

cttcatctct cttggggccc catggggcgg ttccatcaag cccatgcgga tcttggcctc 60
 aggtgacaac cagggcaccc cgatcatgtc caacataaag ctgagagaag aacagcgcac 120
 aaccacaact tccccctgga tgtttccagc tcaccacgtg tggcctgaag accacgtggt 180
 cattttccaca ccaaacttca cnacacaggc caagactteg agcgtttttt tgcagatctt 240
 cattttgaag aaggctggca catgtttcta cagtctcgt 279

<210> 304

SO_3170 US

<211> 306
 <212> DNA
 <213> Rattus norvegicus

<400> 304

cttgggagtc ctcggctgct tacaacttgg agccacctgt gtectggccc ccaagttctc 60
 tgcttcccga tactgggctg agtgccggca gtacagtgtg acagtgggtc tgtatgtggg 120
 tgaagtcctg cgatacttgt gtaatgtccc agggcaacca gaagacaaga aacatacagt 180
 gcggttcgca ttgggcaatg gacttcgggc agacgtgtgg gaaaacttcc agcaacgatt 240
 tgggtccatt cagatctggg aactctacgg ctccacagag ggcaacgtgg gcttaatgaa 300
 tatggg 306

<210> 305
 <211> 296
 <212> DNA
 <213> Rattus norvegicus

<400> 305

gggtttctct gtatttacct ctacaagatc cctggatggg gtctctgggt tcttccaagg 60
 ggccttcctg ctcagtctat ttctgggtgt gttcaaggca gtccaattct acttacgaag 120
 gcaatggctg ctcaaggccc tcgagaagtt cccatccacg ccttcccact ggctttgggg 180
 ccacgacctg aaggacagag aattccagca ggttcttacg tgggtagaga aattcccagg 240
 tgctgtctta cagtggctct caggagcaa aacacgagtc ctgctctatg accctg 296

<210> 306
 <211> 147
 <212> DNA
 <213> Rattus norvegicus

<223> unsure at all n locations
 <400> 306

tcagcttcgg tgcttcccat gagnetccc tgcaatcagn aactatgctt tccctgaggg 60
 tcncctgctt catcctnagc ttggccagca cagtctggac tgcagacacc ggcaccacaa 120
 ttgaattcat anaagcagga ggnnata 147

<210> 307
 <211> 312

SO_3170 US

<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 307

gcacccgcta agtgcggtgt ggcgaactgnc gctgggtgctg gttgtcgctg tcgccactgc 60
ctctcggtcc aatgagctgc accaggatga tccacgtgct ggatccacga cctttgacaa 120
gttcagtcac gcccggtggac atggccatga ggatttgctt ggcacattca ccaccctga 180
agagtttctt gggctcctac aatggtcttc agcgaagaca ttttgtgaat aaaccgaagc 240
ccttgaaacc gtgtctcagc gtcaagcagg aagccaaatc acagaaggaa tggaagagcc 300
cacacagcca ag 312

<210> 308
<211> 284
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 308

gtcagtttca ctgtggaggt cctgcttcca gacaaagcag cagaagagaa gttgaatcag 60
cagggggcag tcacccccaa ataacatctc cctcctgcag caggcctggc cccctcagt 120
gtcttctgt cagtttcttt atagtcattt tctacaacc tattagccca aagaaactgg 180
gctggagggg agacttcaga ctggacggag caccggttca gagtcagaag cggataanta 240
gctagagggg tctctcncat cagaatacta aagggtctcc agag 284

<210> 309
<211> 293
<212> DNA
<213> Rattus norvegicus

<400> 309

gtagccactc taactagggg cgtgctgaga caagaaccac tcattcctct gctgcttttc 60
agacaggact gtctgcca cccacatga tccaggctgc actgttcctt ggctgtatct 120
tactgtctc ggtgaccgcc ttccatgga agactcagga tgggtggcctg ccccatcagc 180
cagctggcac agaaactgag cctacacaac tgetctacag caagagtcct cctccgacct 240
ccagtacctg tcggaacctc ctaagcatgg cgcctctgcc cctgtagtc etc 293

SO_3170 US

<210> 310
 <211> 208
 <212> DNA
 <213> Rattus norvegicus

<223> unsure at all n locations
 <400> 310

gtccctgang cctacaccat cctgcgtgag agatgcccggt ctcattttga ctcagagtct 60
 gtccctctgc ttgtcttctn caagccatnt ggctctacct gctggcactg gtgggcctgt 120
 ggaacctcct gcgcttggtc agggagngga nngtggttag cnatctccaa gacaagtatg 180
 tcttcatcac gggtgtgat caggcttt 208

<210> 311
 <211> 280
 <212> DNA
 <213> Rattus norvegicus

<223> unsure at all n locations
 <400> 311

ggctgtaatg gggctgcctg gctccccctg gcagtgggtg ctgttgctgt tggggctact 60
 gctccctcct gccaccnct tctggctcct caatgtgctc tccccccgc acaccacgcc 120
 caaggctgaa ctcagtaacc acacacggcc tgtcctctc gtgcctggct gcatggggaa 180
 ccggctagaa gccaaagctg ataaacaaa tgtggtaaac tggctgtgct accgaaanac 240
 agaggatttt ttaccacngn ctggattcan anntttcnnc 280

<210> 312
 <211> 181
 <212> DNA
 <213> Rattus norvegicus

<223> unsure at all n locations
 <400> 312

ctggaacact ttaattctgt ccacaagggc agagtgnacn aactcccagc aatctaggac 60
 tncaaccttt agcctttagc ctcaactcctg agggttatgg tgatcaattt tcttggatct 120
 gaagacttgg acatggactg agacctcagt tacagacagc ctgttgtag acttctcagc 180
 c 181

SO_3170 US

<210> 313
 <211> 174
 <212> DNA
 <213> Rattus norvegicus

<223> unsure at all n locations
 <400> 313

cacnaagcta tntataatgg ccagactata cttgggttga aggaataacct ttcatgcoct 60
 ttgggattgc cnaaganaac tttgcaaaat gtttgtaata aagtttgtgg tgaaanacga 120
 agatttgatt tcattggcctt atcccaagtc aggaacgacg cgccggctcg naat 174

<210> 314
 <211> 289
 <212> DNA
 <213> Rattus norvegicus

<223> unsure at all n locations
 <400> 314

atTTTTgttt acccactcga gaagtaagcg ccaaaggggc tagtaagaga acagacagcg 60
 ctggtggtgg ctatttgctc caggcctaac cagtggggaa gtggatttgc gggacacgtg 120
 tctcagcctg gacacttagg ggttcttagc ttgtgaagcc aatccnggtg gaaccgatgt 180
 ggatnaggnt gcantgnnnc tctgtttccc cccaaacttc cccagtaacc tttgggcaag 240
 gtggatgaac ncagn gat tttgaaaagtc aaaaacttcg gtttgttta 289

<210> 315
 <211> 309
 <212> DNA
 <213> Rattus norvegicus

<400> 315

gcccagtgtt ctagggacca tgccatggag gaccagaca agaaagggga agccagagcc 60
 gggagcgaag tagggtctgc cagccccgag gagcaacttg acggatcagc cagccagtg 120
 gagatgcagg atgagggatc agaggagctt cacgagacag gagagccctt gcccccttc 180
 ctgctgaagg aggggtggaga tgaggggcta cactcggcag agcaggatgc cgatgatgag 240
 gcagctgatg atacagatga caccagctcg gtgacctcct ctgccagtct accacctcct 300
 ctcagagtg 309

SO_3170 US

<210> 316
 <211> 211
 <212> DNA
 <213> Rattus norvegicus

<400> 316

cagacctcca ggagaacctg gaagaagtc ttcccaagct gctagctgag aacattcgat 60
 gctttctacct tggccacagc tcacccactc cgggcgtaga ggctctagga gctgccctgg 120
 acgctgcacc ttctgaccca gtgcctgcc agettcgtgc taatataaag tggaaatccc 180
 cagccatatt catctatact tcagggacca c 211

<210> 317
 <211> 282
 <212> DNA
 <213> Rattus norvegicus

<223> unsure at all n locations
 <400> 317

agccggcagc cgagtcggat tgnctgctg cagacgccag gccactccag ccagcactgc 60
 cgttttcacg ccccggtgc agacagctag gaggtttat ctagtttgaa ccaggctgct 120
 ggagctcgct ccttccctct cttttttcc acgaggtgt tttttatgt ggctgcatgc 180
 atgaaatccc aatggtgtag accagtggcg atggatctag gagtttacca actgagacat 240
 ttttcaatgt cttctgtgc gtctttgctg ggaatgaaa cg 282

<210> 318
 <211> 261
 <212> DNA
 <213> Rattus norvegicus

<223> unsure at all n locations
 <400> 318

aagggagaga aatcaatgaa ttttcaatct tgttttttta atgaggcagt gatattatag 60
 catgggttaa ctgctttaat ttacactttt gattgggtgc tggggaataa acctaaagca 120
 tggcatatta atgaagaaca tatggtaacc atgaactcca tctctggatt cctttatcgg 180
 cnatttttta aaggttgaat attcgacca gagaatgaca agtgggtttg acaacatact 240
 ctaggccttc tattaataac a 261

SO_3170 US

<210> 319
 <211> 273
 <212> DNA
 <213> Rattus norvegicus

<400> 319

cgtgggttaca ccaggaccat ggagcccagt atcttgetcc tcttgetct cctcgtgggc 60
 ttcttggttac tcttagtcag gggacaccca aagtcocgtg gcaacttccc accaggacct 120
 cgtcccccttc cctcttggg gaacctcctg cagttggaca gagggggcct cctcaattcc 180
 ttcattgcagc ttcgagaaaa atatggagat gtgttcacag tacacctggg accaaggcct 240
 gtggtcatgc tatgtgggac agacaccata aag 273

<210> 320
 <211> 205
 <212> DNA
 <213> Rattus norvegicus

<223> unsure at all n locations
 <400> 320

ccaggaccat ggagcccagt atcttgetcc tcttgetct ccttgtgggt tcttgttact 60
 cttagtcagg ggacaccnaa attccttggg aaatttcna caagnacttg nncctttcc 120
 cntntngggg aacnctgaa nttggaaana ggaggctcc tnantnctt cangnagttt 180
 cgcgaaaaat atgganatgt ntnca 205

<210> 321
 <211> 289
 <212> DNA
 <213> Rattus norvegicus

<400> 321

caccaggacc atggagccca gtatcttget cctccttget ctccttgtgg gcttcttgtt 60
 actcttagtc aggggacacc caaagtcccg tggcaacttc ccaccaggac ctgcgtccct 120
 tccccctcttg gggaaacctc tgcagttgga cagaggaggc ctctcaatt ccttcattgca 180
 gtttcgcgaa aaatatggag atgtgttcac agtacacctg ggaccaaggc ctgtggtcat 240
 gctatgtggg acagacacca taaaggaggc tctggtgggc caagctgaa 289

SO_3170 US

<210> 322
 <211> 265
 <212> DNA
 <213> Rattus norvegicus

<223> unsure at all n locations
 <400> 322

gccatttggc tcccaaggac attgacctca cgcacaagga gaggggcatt ggaaaaatac 60
 ctccaacgta ccagatctgc ttctcagctc ggtgatccgg ctgaggcagc catgtgcccc 120
 agttctgttg ggaatggcct catgtttctg cctctggggg acctgctgaa aaccaggctc 180
 aaggccactg ctcacatctt cctattgcag ttctccaaag tcccaaggct ttttcttatt 240
 cctgtgaatg gcaactgaaga agtca 265

<210> 323
 <211> 234
 <212> DNA
 <213> Rattus norvegicus

<400> 323

gtaaaatgcc atacactgat gcagttatcc atgagattca gaggttttca gatcttgtcc 60
 ctattggagt accacacaga gtcaccaaag acaccatgtt ccgagggtac ctgcttccca 120
 agaacactga agtgtacccc atcctgagtt cagctctcca tgaccacag tactttgacc 180
 acccagacag cttcaatcct gaacacttcc tggatgccaa tggggcactg aaaa 234

<210> 324
 <211> 235
 <212> DNA
 <213> Rattus norvegicus

<223> unsure at all n locations
 <400> 324

gaaacttggt cattctagca gcacagantc agaactgaga actggccatg gcacggaaac 60
 aaccacatag ctggctgaan gctgtgctct ttgggtcctt gcttattctt atccatgtgt 120
 ggggtcagga ctcaccagag tccagctcca tcaggaccac acaanatann attnanaaan 180
 gnaagcttga cnacgtgagg gacactaaag ctggtgtcca nacaacanaa ngttc 235

<210> 325
 <211> 263

SO_3170 US

<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 325

aaagtcccaa ggnttgttct tattcctgtg aatggcactg aagaagtcaa tgcactgtct 60
tattttgaca tgtgaacaga gatttcatga gtacacatct catgctgagt caattccctc 120
ttcctcctaa tagccacagt cccacttat cagccctcca tggctctgtga tctgtgctaa 180
tggactctgt atatgggtctc agtgctatgt ctacagactt acatagtatg tatgggttcag 240
gtaaacagat cacagagtgt gtg 263

<210> 326
<211> 300
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 326

gtgcagaaaag actgaaggag ccagaaaanta tcaatgccag ggaaactgtc ttgcagaccc 60
aacaggaact gatacacgag ccaaaccagc aatgtcttcc cctgcacagc ctgcagttcc 120
tgccccactg gccaaactga agattcaaca caccaagatc ttnataaaca atgaatggca 180
tgattcagtg atggcaagna attacctgtc cttaaccctg caatgaggag gtcactctgac 240
atgtggaaga agggacaagg cagatgttga caagctgtga agccgcaaga caggctttcc 300

<210> 327
<211> 350
<212> DNA
<213> Rattus norvegicus

<400> 327
acacagatga gtactgttgc accattccta tggatcatggg cactgctcaa 60
ataataaaagg agctatccag agagaacctg caggctgttc taaaggatac agcagcacia 120
atgatgcttc ctctgagtg tggtgacctg ctcatggaag agtacatggg gaacactgat 180
gattcccaga ccctacaaat acagtacaca gagatgatgg gagacttctt gtttgtgac 240
cctgcactcc aagtagcaca ctttcagcgt tcccatgcc ctgtctactt ctatgagttc 300
caacatgcac ccagctattc aagaatgtca ggccacccca gtgaagggtga 350

SO_3170 US

<210> 328
 <211> 258
 <212> DNA
 <213> Rattus norvegicus

<223> unsure at all n locations
 <400> 328

agantgtnga gcgagcnaag naatatgtcc ttgganance tctgnnccaa gnaatanatc 60
 agggccctca gattnacaag gagcaacatg ataaaatcct tgatctcant gagagtggga 120
 agaangaagg agccaanctn gagtgtggtn taggacgeng ggggnacaaa ggcttcnttg 180
 tccancccn agtcatctcc aatgtgacng atgagatgng cattnccnaa gagngatat 240
 ttggancagn gcaacaaa 258

<210> 329
 <211> 245
 <212> DNA
 <213> Rattus norvegicus

<223> unsure at all n locations
 <400> 329

gaaatgatgt ggccagggtc atcaactggt tggaggnaga atttaactac ccctagaca 60
 atgtccacct cttagggtac agtcttgag cccatgctgc tggcgtggca ggaagtctga 120
 ccaacagaag gtcaatagaa ttactggctt ggatccagct gggcctaact ttgagtatgc 180
 agaagccct agtcgccttt ctctgatga tgcggatttc gtagatgtct tacacacatt 240
 tacca 245

<210> 330
 <211> 191
 <212> DNA
 <213> Rattus norvegicus

<400> 330

gattatttgt agccaccatg agagactttg ggataggaaa gcagagtgtg gaggatcaga 60
 taaaggagga ggccaaatgt ttagtggagg aactgaagaa tcatcagga gtctccctgg 120
 acccaacgtt cctcttcag tgcgtcacag gcaacataat ctgctccatt gtctttggag 180
 agcgctttga c 191

SO_3170 US

<210> 331
 <211> 265
 <212> DNA
 <213> Rattus norvegicus

<400> 331

aggaagccct gcagagcacc agaggcccag cttagagggac aacacagagg agtaatttgc 60
 tgacagacct gcagggatgg acctgcttcc agctctcaca ctggaaacct gggtcctcct 120
 ggcagtcgtc ctggtgctcc tctacggatt tgggaccgc acacatggac ttttcaagaa 180
 acaggggatt cctgggccc aacctctgcc ttttttggc actgtgctga attactatat 240
 gggtttatgg aaattcgatg tggag 265

<210> 332
 <211> 296
 <212> DNA
 <213> Rattus norvegicus

<400> 332

gactgctgga accaactgcc tctcttacc tccaccttct tctgtcacct ctaccacggc 60
 caccatgtcg caagcccggc ctgccactgt gctgggtgcc atggagatgg gtcgccgcac 120
 ggatgtgacc tccagctccg cgtcgggtgcg cgccttctg cagcgcggcc acacggagat 180
 agacaccgcc ttcgtgtatg cgaacggcca gtctgagacc atcctaggag acctggggct 240
 cggactgggc cgcagcggct gcaaagtaaa aattgccacc aaggctgccc caatgt 296

<210> 333
 <211> 214
 <212> DNA
 <213> Rattus norvegicus

<400> 333

gagatgttcc ctgtcatcga acagtatgga gacatcttgg taaaatactt gaggcaagag 60
 aaaggcaaac ctgtccctgt gaaagaagtg tttggtgcct acagcatgga tgtgatcacc 120
 agcacatcat ttggagtga tgttgattcc ctcaacaacc cgaaggatcc ttttgtggag 180
 aaagccaaga agctcttaag aattgatttt ttg 214

<210> 334

SO_3170 US

<211> 183
 <212> DNA
 <213> Rattus norvegicus

<400> 334

ggcagcattg atccttatgt atatctgccc ttgggaaatg gaccaggaa ctgcattggc 60
 atgagggttg ctctcatgaa tatgaaactc gctctcacta aagttctgca aaacttctcc 120
 ttccagcctt gtaaggaaac acagatacct ctgaaattaa gcagacaagg acttcttcaa 180
 cca 183

<210> 335
 <211> 174
 <212> DNA
 <213> Rattus norvegicus

<400> 335

attggcacca aggagggaat cctgcagtag tgccaagagg tctacctga actgcagatc 60
 acaaactgtg tggaagccaa ccagccagtg accatccaga actggtgcaa ggggggcccgc 120
 aagcagtgca agacgcacac ccacatcgtg attcttaccg gtgcctagtt ggtg 174

<210> 336
 <211> 241
 <212> DNA
 <213> Rattus norvegicus

<400> 336

atttgggcat ggggaaaagg aacattgagg atcgtgttca agaggaagca cggtgccttg 60
 tggaggaact gaggaaaacc aatggctcac cctgtgaccc cacgtttatc ctgggctgtg 120
 ctcccttgcaa tgtcatctgc tccattatct tccagaatcg ttttgattat aaagatcagg 180
 attttcttaa cttgatggaa aaactcaatg agaacatgaa gattttgagc agtccctgga 240
 c 241

<210> 337
 <211> 289
 <212> DNA
 <213> Rattus norvegicus

<223> unsure at all n locations
 <400> 337

SO_3170 US

atgaaggctct ttgtgcccac tggcttttca gccttccctt ccgagctact gcatgcccac 60
 gaaaaagtgg gtgaagggtca agtaccoccaa actcatctcc tattctctaca tggaacgtgg 120
 gggccacttt gctgcctttg aagagcccaa gcttctggcc aggacatccg caagtctgtg 180
 tccctggctg agctgnagta ntnacggntt annaaantgt ggctttagna naancctgg 240
 tccccanagn aannttggnn aacccccctn gggaaaaant tntccccc 289

<210> 338
 <211> 243
 <212> DNA
 <213> Rattus norvegicus
 <223> unsure at all n locations
 <400> 338

tgggcagaaa ggaagccctg cagagcatca gangcccagc tagagggaca acacagagga 60
 gtaatttgcg gacagacctg cagggatgga cctgctttca gctctcacac tggaaacctg 120
 ggtcctcctg gcagtcgtcc tgggtgctct ctacggattt gggaccgcga cacatggact 180
 tttcaagaaa caggggatcc ctgggcccac acctctgctt ttttttggca ctgtgctgaa 240
 tta 243

<210> 339
 <211> 289
 <212> DNA
 <213> Rattus norvegicus
 <223> unsure at all n locations
 <400> 339

gcagaaaagga agccctgcag agcatcagag gccagncag agggacaaca cagaggagta 60
 atttgctgaa cagacctgca gggatggacc tgctttcagc tctcacactg gaaacctggg 120
 tctcctggc agtcgtcctg gtgctcctct acggatttgg gaccgcaca catggacttt 180
 ncaagaaaca ggggatccct gggcccaaac ctctgccttt ntttggcatg tgctgaattn 240
 ctatatgggt ttatggaaat tcgatgtgga gtgcataaa aagtatgga 289

<210> 340
 <211> 289
 <212> DNA
 <213> Rattus norvegicus

SO_3170 US

<400> 340

atttaagggtg atctatctca tcagaaatcc cagagatggt cttgtttctg gttattattt 60
 ctggggtaag acaactcttg cgaagaagcc agactcactg ggaacgtatg ttgaatgggt 120
 cctcaaagga aatgttccgt atggatcatg gtttgagcac atccgtgcct ggctgtctat 180
 gcgagaatta gacaacttct tgttactgta ctatgaagac atgaaaaagg atacaatggg 240
 aaccataaag aagatatgtg acttcctggg gaaaaaatta gagccagat 289

<210> 341

<211> 278

<212> DNA

<213> Rattus norvegicus

<400> 341

atggaatacc tggatatggt gttgaatgaa accctcagat tgtatccaat tggtaataga 60
 cttgagagag tctgtaaaaa agatgttgaa atcaatgggtg tgtttatgcc caaaggggtca 120
 gtgggtcatga ttccatotta tgetcttcac cgtgatccac agcactggcc agagcctgag 180
 gaatttcgcc cagaaagggt cagcaaggag aacaagggca gcattgatcc ttatgtatat 240
 ctgccctttg gaaatggacc caggaactgc attggcat 278

<210> 342

<211> 312

<212> DNA

<213> Rattus norvegicus

<223> unsure at all n locations

<400> 342

cggtcggtac cggagagcgc aggttgatc accaactatg gggactctca cgaagacacc 60
 agtgccacca tgctgangc cgtggctgaa gaagtgtctc tattcagcac gacggacatg 120
 gttctgtttt ctctcatcgt gggggctctg acctactggt tcctcttttag aaagaagaaa 180
 gaagagatac cggagttcag caagatccaa acaacggccc caccgtcaa agagagcagc 240
 ttctgtgaaa agatgaagaa aacgggaagg aacattatcg tattctatgg ctcccagacg 300
 ggaaccgctg ag 312

<210> 343

SO_3170 US

<211> 287
 <212> DNA
 <213> Rattus norvegicus
 <223> unsure at all n locations
 <400> 343

agctagttag gcctctgggg ctgcgaccta cctcgagag gggtttgac taaggcgtg 60
 ggcgccgtga ctccgggcgc tgtggaccat ggctccgccc caggcgccca acagggaccg 120
 tgcangccag gaggatgagg accgttgga acacgggggg accgcaaggc ccggaagccc 180
 ctggtggaga agaagcgacg cgcgcggatc aacgagagtc ttcaggagtt gcggctgctg 240
 ctagcgggca ccngtgcag gccaaagctag agaacgcga ggtgctg 287

<210> 344
 <211> 232
 <212> DNA
 <213> Rattus norvegicus
 <400> 344

cattcttgac cagtaccaca tttttgagcc caagtgcctg gacgccttcc caaacctgaa 60
 ggacttctct gcccgccttg agggcctgaa gaagatctct gcctacatga attgcagccg 120
 ctacctctca acacctatat tttcgaagtt ggcccaatgg agtaacaagt aggccttgc 180
 tacactggca ctacagaga ggacctgtcc acattggatc ctgcaggcac cc 232

<210> 345
 <211> 223
 <212> DNA
 <213> Rattus norvegicus
 <400> 345

tgtctgcaag cacaacattg aatcagtaac agttgtcagg gttggtgact gccatggaa 60
 tggatctttt attcatgagc aattcagccc caaatgaat ttggaaaact tttgctgaa 120
 gtacttattg aaatacaatc aagagacctg ctgaatattt tgatgcgttc tcaaaagtgt 180
 atggtcctgt atttactctt tactttggca tgaagcccac tgt 223

<210> 346
 <211> 278
 <212> DNA
 <213> Rattus norvegicus

SO_3170 US

<223> unsure at all n locations

<400> 346

atggagtaac aagtaggccc ttgctacact ggcactcaca gagaggacct gtccacattg 60
 gatcctgcag gcaccctggc cttctgcact gtggttctct ctccttcttg ctccttcttc 120
 cagctttgtc agccccatct cctcaacctc accccagtcg tggccacata gtcttcattc 180
 tccccacttt ctttcatagt ggnccccctc tttattgaca ccttaacaca acctcacagt 240
 ccttttctgt gattgaggtc tgccctgaac tcagtctc 278

<210> 347

<211> 295

<212> DNA

<213> Rattus norvegicus

<223> unsure at all n locations

<400> 347

gcggggccgtg ggtgatctgg tcggtaccgg agagcgcagg ttgtatcacc aacatggggg 60
 actctcacga agacaccagt gccaccatgc ctgaggccgt ggctgaagaa gtgtctctat 120
 tcagcacgac ggacatgggt ctgttttctc tcatcgtggg ggtcctgacc tactggttca 180
 tctttagaaa gaagaaagaa gagataccgg agttcagcaa gatccaaaca acggccccac 240
 ccgtcaaaga gaggagcttc gtggaaaaga tgaagaaaac ggggaangaac ttatc 295

<210> 348

<211> 230

<212> DNA

<213> Rattus norvegicus

<400> 348

tcagtgcag aacaggaact taacctttgg tgattctcat gggactacct ccacccacat 60
 ctggttgtct ctgtaattt cttttgatag taaccttgct tctgtaattt gatcaagaat 120
 ttttcatgaa aatgtgaact attgtgacaa ctttaattgt agatttggtg tcagatgttt 180
 tagatgcatt attctacact aaatgttaca tggaaaaaat gtgaataaac 230

<210> 349

<211> 282

<212> DNA

<213> Rattus norvegicus

SO_3170 US

<223> unsure at all n locations
<400> 349

cccggtcteta tattaggcca acagcggccc tagccgaggc tgttcgtgaa gaagggcact 60
ggtcgggttta gcgtcctccg ctcgngtgcc caccgcccgc tcgtcgagag cccgcgcagg 120
acccgggaca ctttgcagac atggagaactg tcgttcgcag atgcccatte ttatcccagag 180
tccttcaggc ntttctgcag aaggcagggg aatctctgct gttctatgct caaaactgcc 240
ccaagatgat ggaagtcggg gccaaagccgg ctctcgggac cg 282

<210> 350
<211> 280
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 350

ccgaggcagt tcacccgagg ccgatctccg aggtctgcca gcggctactt cccacagcct 60
ccgccatggg tctggagctt ctacctggac ctgatgtccc agcnntgccg tgccgtctac 120
atcttcgcca agaagaacgg catccocttc cagctgcgta ccatcgagct gcttaaaggt 180
cagcattaca ctgatgcctt tgcccagggtg naccctttga ggaagggtgcc ggctttgaag 240
gatgggggact tcgtcttggc agagagtgtg ccatcttgct 280

<210> 351
<211> 309
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 351

tcttagccaa catgatcagt gaaccagaa tcagttacgg caacgatgct ctcatgcctt 60
ctttgactga nacgaagacc actgtggagc tccttcccgt gaatggcgaa ttcagcctgg 120
atgatctcca accgtggcat ccttttgggg tggactctgt gccagccaat acagaaaatg 180
aagggtctgg gttgacaaac atcaagacag aagagatctc agaagtgaag atggatgcgg 240
agttcggaca tgattcangc ttogaatccg ccatcaaaaa ctggtggtct tgcagaagng 300
tgggtcaaa 309

SO_3170 US

<210> 352
 <211> 228
 <212> DNA
 <213> Rattus norvegicus

<400> 352

qctqctgca aaatcttcga gagccgaccc aaactggctg cgtggcgta gggggtggaa 60
 gccgcagtgg gggagagcct cttccaggag gcccatgaag tcgtcctgaa ggccaaagat 120
 atgcctccct tgatggaccc gaccttgaag gagaaactga agctctctgt tcaatgcctg 180
 ctgcactgag ggaacagcct gaagtcaagg gaaacttggt gtgtgcgt 228

<210> 353
 <211> 298
 <212> DNA
 <213> Rattus norvegicus

<223> unsure at all n locations
 <400> 353

caggatcatg gatactagtg tctttctcct ccttgctgtc ctctcagct tcttgctatt 60
 cctggtcaga ggccatgcaa aagttcatgg tcattctcca ccaggacccc gtcccttacc 120
 cctcttggga aacctcttgc agatggacag aggaggcttt cgtaagtctt tcattcagct 180
 tcaagaaaaa cacggagatg tgttcacagt atactttgga cctaggcctg tggatcatgct 240
 gtgtgggaca cagaccataa gggaggctct ggtggacatg ctgaggnttc tctggcgg 298

<210> 354
 <211> 326
 <212> DNA
 <213> Rattus norvegicus

<223> unsure at all n locations
 <400> 354

gacaaaatcc cagaataagg aaactctgaa ccaggagtca tggaagtcaa acccaagctc 60
 tactactttc aaggcagggg aaggatggag tcgatccgct ggctgctggc tacagctgga 120
 gtggagtttg aagaagaatt tottgagacg agagaacaat atgagaagtt gcaaaaggat 180
 ggatgcctgc tttttggcca agtccattg gtggaaatag acgggatgct actgacacag 240
 accagagcca tctcagcta cctggccgcc aagtacaact tgtatgggaa ggacctgaan 300

SO_3170 US

gagagagtca ggattgacat gtatgc 326

<210> 355
 <211> 274
 <212> DNA
 <213> Rattus norvegicus
 <223> unsure at all n locations
 <400> 355

tccttctcct ccttgcgtgc ctctcagct tcttgcatt cctggtcaga ggccatgcaa 60
 aagttcatgg tcatcttcca ccaggacccc gtccentacc cctcttggga aaacnctttg 120
 aagaatggac agaggaggct ttgtaagtct ttcattnagc ttcaagaaaa acacggagat 180
 gtgttcacaa gtatacttgg aactaggcct gtggtcatgc tgtgtgggac acagaccata 240
 agggaggctc tgggtggacat gctgangctt ctct 274

<210> 356
 <211> 148
 <212> DNA
 <213> Rattus norvegicus
 <223> unsure at all n locations
 <400> 356

cggccccact gcctcagaga cctacaggac cgcgggncgt gggatgatctg gtcgggtaccg 60
 gagagcgcag gttgtatcac caacatgggg gactctcagc aagacaccag tgccaccatg 120
 cctgaggccg tggctgaaga agtgtctc 148

<210> 357
 <211> 302
 <212> DNA
 <213> Rattus norvegicus
 <400> 357

ttagatctga ctgaaatgat tatccaattg gtaatatgtc cccagacca aagagaagcc 60
 aagaccgcct tggcaaaaaga caggacaaaa aaccgggtact tgctgcctt tgaaaagggtg 120
 ttgaagagcc atggccaaga ctaccttgta ggtaacaggc tgaccgggt agacatccac 180
 ctgctggaac ttctctctta tgttgaagag tttgatgcca gccttctgac ctctttccct 240
 ctgctgaagg ccttcaagag cagaatcagc agcctcccca atgtgaagaa gttctgacg 300

<210> 358
 <211> 286
 <212> DNA
 <213> Rattus norvegicus

<400> 358

cggaagtgaa ccaaggcact gagcggcatc taatgcacct ggagttggac atctcagact 60
 ccaagatcag gtatgaatct ggagatcacg tggtctgtgta cccagccaat gactcagccc 120
 tggccaacca gattggggag atcctgggag ctgacctgga tgtcatcatg tctctaaaca 180
 atctcgatga ggagtcaaac aagaagcatc cgttccctg cccaccacc taccgcacgg 240
 ccctcaccta ctacctggac atcactaacc cgccacgcac caatgt 286

<210> 359
 <211> 320
 <212> DNA
 <213> Rattus norvegicus

<400> 359

caagttcctg cagaacaagg ccttcctaac aggaccccat atctccgtgg ctgacttggt 60
 ggccatcaca gaactgatgc atcctgtcag tgctggctgc aaaatcttcg agagccgacc 120
 caaactggct gcgtggcgtc aggggtggaa gccgcagtgg gggagagcct cttccaggag 180
 gccatgaag tcgtcctgaa ggccaaagat atgcctccct tgatggacce gaccttgaag 240
 gagaaactga agtctctgtt caatgctgct gcatgagggg acagcctgaa gtcaagggaa 300
 acttgtgtgt gcgtgtgtgt 320

<210> 360
 <211> 288
 <212> DNA
 <213> Rattus norvegicus

<223> unsure at all n locations
 <400> 360

tngcctctgt ccaccgaggc agttcaccgc aggcgatct ccgaggtctg ccagcggcta 60
 cttccacag cctccgccat gggctctggag ntctacctgg actgatgtcc cagccctgcc 120
 gtgccgtcta catcttcgcn aagaagaacg gcacccctc cagctgcgta ccacgagct 180

SO_3170 US

gcttaaaggt cagcattaca tgatgcnttg cncaggtgaa cntttgngga aggtgccggc 240
 nttgaagcng gagattcgtc ttgccaanna tgtggcanen tgctgtat 288

<210> 361
 <211> 272
 <212> DNA
 <213> Rattus norvegicus
 <400> 361

gaactctgct caacagcctc tttctctagt tcttgcagac aaaatcccag aataaggaaa 60
 ctctgaacca ggagtcattg aagtcaaacc caagctctac tactttcaag gcaggggaag 120
 gatggagtcg atccgctggc tgctggctac agctggagtg gagtttgaag aagaatttct 180
 tgagacgaga gaacaatatg agaagttgca aaaggatgga tgcttgcctt ttggccaagt 240
 cccattggtg gaaatagacg ggatgctact ga 272

<210> 362
 <211> 286
 <212> DNA
 <213> Rattus norvegicus
 <223> unsure at all n locations
 <400> 362

ggcccatgga gcacaccag gctgtggact atgttaagaa gctgatgacc aagggccgct 60
 actcactaga tgtgtggagt aggagctacc accctcccac cctcgcctcc ctgtaatcac 120
 ctaacttctg ccgacctcca cctctggtgg ttcttgctg gcttgacac agggaggccc 180
 agggactgac tcttggcctg agtngtgccc tcttgggccc ctaagcagag tccggctcat 240
 tgtatcaggc agcccagccc caaggcacat ggcaagaggg attgac 286

<210> 363
 <211> 288
 <212> DNA
 <213> Rattus norvegicus
 <223> unsure at all n locations
 <400> 363

gtaaaagang ccttgattga tcatggggag gagtttctg aaagaggaag cttcccagta 60
 gctgaaaaaa ttaataaaga ccttggaatt gtttttagcc atggaaatag atggaaagaa 120

SO_3170 US

ataagacgct taccctcacg actctgcgga atttgggcat gggganaagg aacattgagg 180
 ntcgtgttca anaggcaanc ccggnancct nggggaggac ctgnggaaan ccatggggcn 240
 caccgtgna cccangtnt atccctgggc tgngcncctt gnannacc 288

<210> 364
 <211> 237
 <212> DNA
 <213> Rattus norvegicus

<400> 364
 tcacagctaa agtccaggaa gagattgatc gtgtggttgg caaacatcgc agcccttgca 60
 tgcaggacag gagccgcacg ccctacacag atgccatgat tcatgaggtc cagaggttca 120
 ttgacctcat tctaccaac ctgccacatg cggtagacctg tgacattaag ttcaggaact 180
 acctaatacc caaggggaaca acaataataa catcactctc atcagtgtctg catgaca 237

<210> 365
 <211> 304
 <212> DNA
 <213> Rattus norvegicus

<400> 365
 ggagaatgga gcccatccgg tggctcctgg ctgcagctgg agtagagttt gaagaacaat 60
 ttctgaaaac tcgggatgac ctggccaggc taaggaatga tgggagtttg atgttccagc 120
 aagtgcccat ggtggagatt gatgggatga agctggtgca gaccagagcc attctcaact 180
 acattgccac caaatacaac ctctatggga aggacatgaa ggagagagcc ctcatcgaca 240
 tgtatgcaga aggagtggcg gatctggatg aaatagttct ccattaccct tacattcccc 300
 ctgg 304

<210> 366
 <211> 218
 <212> DNA
 <213> Rattus norvegicus

<223> unsure at all n locations
 <400> 366

ggcactggtc ggttttagcgt cctccgctcg agtgcccacc gncgtctcgt acgagagccc 60

SO_3170 US

gcgcaggacc cggcgacact ntgcagacnt ggagactgtc gtttcgcaga tgcccattct 120
 tatccccgagt ccctcaggcn tttctgcaga aggcagggaa atctctgctg ttctatgtc 180
 aaaactgccc caagatgatg gaatcggggc naanccgg 218

<210> 367
 <211> 269
 <212> DNA
 <213> Rattus norvegicus

<223> unsure at all n locations
 <400> 367

ggtcnccatg gatctgggtca ctttcttgggt acttactctc tctctctca ttctctctc 60
 actctggaga nagnnccgct aggagaagga agctcnctcc tggccccact cctctccna 120
 ttatcggtaa tttccctccn gatagatgtg aagaacatca gccaatccta accaagtttt 180
 caaaaaccta tggccctgtg ttcactctgt atttgggctc acagcccnct gtcattattgc 240
 atggatntga agcnataaag gagctctgt 269

<210> 368
 <211> 270
 <212> DNA
 <213> Rattus norvegicus

<223> unsure at all n locations
 <400> 368

gagaccgcca gttccgtctc tactcttttg tgaggactgc agccaacacc gctgacaatg 60
 cagatctttg tgaaaacctt aactggtaag accatcacc tggaggctga gccagtgac 120
 accattgaaa atgtcaaggc aaagatccag gacaaggagg gcatcccccc tgaccagcag 180
 aggctgatct ttgcaggcaa gcagctggaa gatggccgca cctgttcag actacaacat 240
 ccagaaggag tccaccntgc acctggtcct 270

<210> 369
 <211> 238
 <212> DNA
 <213> Rattus norvegicus

<400> 369

ggaagcaatg attctaggtg tgtttctggg gctttttcta acatgtctgc ttctccttc 60

SO_3170 US

actgtggaag cagaattttc agagaagaaa ccttcctcct ggccccacac ctcttcctat 120
 cattggaaat attcttcaga tagatcttaa ggacatcagc aaatctctga ggaatttttc 180
 aaaagtctat ggccctgtgt tcaccctgta ctttggcagg aagcctgctg tgggtgta 238

<210> 370
 <211> 260
 <212> DNA
 <213> Rattus norvegicus
 <223> unsure at all n locations
 <400> 370

aaaggaccag ttctgtattg gtgggttagta ggctacgttg tcatggtggc ctctggcaac 60
 ccaggtagct gaaaaccagt ttcagggaca gcagtggaga acatactcta ggcaaacata 120
 ctggcctgtt tccattataa caagatacct aaggccaact actttnttta ccaagagaag 180
 aggtttgtta cagcacaaga tgaggtggcc ccgtcgtag cccttgaggg gccatgtgga 240
 aaataacacg tggtgaggga 260

<210> 371
 <211> 283
 <212> DNA
 <213> Rattus norvegicus
 <223> unsure at all n locations
 <400> 371

cgcgcgtccc ttaccccggt ggctgcggcg atgcgtacga tgagctggat ggctcggtc 60
 atgtagaagc gaccgtccnc gccacaaacc agcgtggcct cctgcctcaa cgccggctcc 120
 acggtggaga cgatgctttg gatgaaattc tccgcatagt tagcgttgcc ctggaacacc 180
 tncactcgct tccgcaaccc gctggtgccc ggcttctgat ccgntatgc ctgcgtcttc 240
 actgtcacga tcttcacat ggtggccggg gctgcgnggc gac 283

<210> 372
 <211> 273
 <212> DNA
 <213> Rattus norvegicus
 <223> unsure at all n locations
 <400> 372

gaaaagttca tgctatcgt ttacactncc acngngngtc ntgcatgnca gcaatacagt 60

SO_3170 US

tggcattccg gaagccaaga ngcctcttta tcagnatcca cganaaaggg natattgctt 120
 cagttctgaa cgcatggcca gaagatgttg tnanngctat tgtgggtgact gatgggatag 180
 nggatcctnc ggntngggcg acctttgttn tannggggtg ggcattcctg ggggtgtaaag 240
 ggtccctgna aacaggttng gggggtnat ccc 273

<210> 373
 <211> 301
 <212> DNA
 <213> Rattus norvegicus

<400> 373

tacggaagta gttcccgtg cttatgccat ggtcctggaa ctgtacctgg atctgctgtc 60
 gcagccctgt ccgcgtatt tatatcttcg ccaagaagaa caatatcccg ttccagatgc 120
 atactgtgga gctgcgcaag ggtgagcacc tcagcgatgc ctttgcccag gtgaacccca 180
 tgaagaaggt accagccatg aaggatgggtg gcttcacctt gtgtgagagt gtggccatcc 240
 tgctctacct ggcgcacaa tataaggttc ctgaccactg gtacccccaa gacctgcagg 300
 c 301

<210> 374
 <211> 309
 <212> DNA
 <213> Rattus norvegicus

<400> 374

gggtctccat ggatctgggc actttcctgg tacttaactct ctctctctct attctctctt 60
 cactctggag acagagctct aggagaagga agctccctcc tggccccact cctctcccaa 120
 ttatttgtaa tttcctccag atagatgtga agaacatcag ccaatcctta accaagtttt 180
 caaaaacctt tggccctgtg ttcactctgt atttgggctc acagcccact gtcattattgc 240
 atggatatga agcaataaag gaagctctga ttgataacgg ggagaagttt tctggtagag 300
 gaagctatc 309

<210> 375
 <211> 298
 <212> DNA
 <213> Rattus norvegicus

SO_3170 US

<223> unsure at all n locations
<400> 375

gtacccacat gtcacagcta aagtccagga agagattgac cgtgtgattg gcagacatcg 60
cagcccctgc atgcaggata gaaaacacat gccctacaca gatgccatga ttcattgaggt 120
acagagattc attaactttg tcccgaccaa cctgccccat gcagtgcact gtgacattaa 180
attcaggaac tacctcatcc cgaaggaaca aaagtgttaa catcactgac atcagtgtctg 240
catgacagca aggagttccc naaccagag atgtttgacc ctggccactt tctagatg 298

<210> 376
<211> 234
<212> DNA
<213> Rattus norvegicus

<400> 376
cagacatcgc agcccctgca tgcaggatag aaaacacatg ccctacacag atgccatgat 60
tcatgagggg acaaaagtgt taacatcact gacatcagtg ctgcatgaca gcaaggagtt 120
ccccaaccca gagatgtttg accctggcca ctttctagat gagaatggaa actttaagaa 180
aagtgactac tttttgcctt tctcagcagg aaaacgagct tgtgttgagg aggg 234

<210> 377
<211> 267
<212> DNA
<213> Rattus norvegicus

<400> 377
gtcctgacca ggctacgata tggtaaggcg gatgtctatt gtctatgcac taggcgcctg 60
gtcgggtgctg ggctcggcga ttttccttac acgaaaaccg aagatgtcag actatgggga 120
aatgaagag gatgactcaa gcaatgaaat gcctttttct acaagtgaag actctgattt 180
agcgatggaa agggctgagc ctattaaagg gttttatacg aagacaattg taaagtattc 240
agaaaaattct gttccattac tcagagg 267

<210> 378
<211> 249
<212> DNA
<213> Rattus norvegicus

SO_3170 US

<223> unsure at all n locations
<400> 378

aatccggnag aggatccacc tgagacctga ggnccgctta ttcttctttg tcaacaacac 60
tatccctccc accagtgcta ccatgggaca gctgtatgag gacaaccatg aggaagacta 120
ttttctgtat gtggcctaca gtgatgaaag tgtctacggg aaatgaggca gaagcccagc 180
agatgggagc gcctggactt gggggtaggg gaggggtgcg tgtgggactt ggggaaccag 240
agggagggc 249

<210> 379
<211> 292
<212> DNA
<213> Rattus norvegicus

<400> 379
gaagggagct cagcacgttc agccctgcaa ggggcagtac acaaaattga gagtaaagct 60
cgaagagaga cttgtttaaa gaaaacggca atggatttga tcccaaactt ttccatggaa 120
acctggctgc tcttggttat cagcctgggtg ctctctacc tatatggaac tcattcacat 180
ggaattttta aaaagttggg aattcctggg cccaaacctt tgcttttctt ggggacgatt 240
ctgcttacag gaagggctct ggggaattgac aaatactgcc ataaaaaata tg 292

<210> 380
<211> 168
<212> DNA
<213> Rattus norvegicus

<400> 380
ctagcccgta tggagttatt ttatttctg accacgattt tacaaaactt taagctgaaa 60
tctgtacttc acccaaagga tatcgatata actccagttt tcaatggatt tgctctctg 120
ccaccatttt atgagctgtg cttcattcct ctctaaagag atcaaatt 168

<210> 381
<211> 298
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 381

SO_3170 US

accagtttct ggttccactc gcagagaagc agagaagcgg agnaagcggc gcgttccaga 60
 acctncgggc aagaccagcc tctcccagag cateccccacc gcgaaggcan accttctcca 120
 gagcataccc cagcggagcg nacccttccc cagagcatcc ccgccgcaa gcgcaacctt 180
 ccagaagcag agagcggcga catggccaag aaaacagcga tcggcatcga cctgggcacc 240
 acctactcgt gcgtggggcgt gttccagcac ggcaagggtgg agatcatcgc caacgacc 298

<210> 382
 <211> 297
 <212> DNA
 <213> Rattus norvegicus

<223> unsure at all n locations
 <400> 382

ananaataga agaacaccag gaatcattgg atgttataaaa cctctgtgat tttgttgatt 60
 attacctgat taaacaaaaa caggcaaaca acatcgaaca atcagaatat tcacatgaaa 120
 atctgacatg cagtatcatg gatctcattg gtgcagggac agagacaatg agcacaacat 180
 tgagatatgc tctcctgctt ctgatgaagt acccacaatgt cacagctaaa gtccaggaag 240
 agattgaccg tgtgattggc agacatcgca gcccttgcac gcaggataga aaacaca 297

<210> 383
 <211> 234
 <212> DNA
 <213> Rattus norvegicus

<400> 383

aacgcagccg actctgcagc attgccatgt caggaatgat attgggaatc tttgctgtgc 60
 tccttgtggg cggcatcatt agtgaagccc tcgggtggcc ctttgtcttt tatactcttg 120
 gaagtattgg tgtgggtctgc tgccttctct ggtcattctt ggtttatgat gaccctgtct 180
 ctcacccatg gataagtagc ccagaaaagg agtatatttt atcctccctg gacc 234

<210> 384
 <211> 299
 <212> DNA
 <213> Rattus norvegicus

<223> unsure at all n locations
 <400> 384

SO_3170 US

agctgccatc ttgcgtcccc gcgtgtgtgc gccttatctc agctgggtctg cccgagacnc 60
tctgagcgtg aaccttagtc ccccgcgcgg ccccatcttc actccgacaa gatgaaagaa 120
acgatcatga accaggaaaa actcgccaaa ctgcaggcac aagtgcgcat tgggtgggaaa 180
ggaactgctc gtagaaagaa gaagggtggtt cacagaacag ccacagcaga cgataaaaaa 240
ctgcagttct ccttaaagaa gttaggggta aacaatatct ctgtattgaa gaggtgaac 299

<210> 385
<211> 291
<212> DNA
<213> Rattus norvegicus

<400> 385
ctgacgttgt ctatagaaca gtggccaacc tttctggatg tgagcaggtg gactccaagg 60
ctctggtgaa ctgtctacga ggcaagagcg aggaagagat tatgtctatt aacaaggcct 120
tcaggatcat ctctggcata gtggatggta tcttccttcc cagacatccc aaggagctgt 180
tggcctctgc tgactttcac cccattccca gcattattgg tgtcaacaat gatgagtatg 240
gctggatcat tccctcgagc atgaccacca ctgactccaa gaagaaaatg g 291

<210> 386
<211> 304
<212> DNA
<213> Rattus norvegicus

<400> 386
actgagtgga cctgtgaaga atccaaattc caaacaattt tcaacatgga ttcccgtaga 60
ttccggagaa gaggggaagga gatggtggat tatatagctg actatctgga cggcattgag 120
ggacgtccag tgtaccctga cgtggagcct ggctaccttc gggccctgat ccccaccact 180
gccccccagg agccagaaac atatgaggac ataatcagag acattgaaaa gataatcatg 240
ccagggtcac aactggcac agcccctact tcttcgctta ctccccagg ccagctccta 300
ccca 304

<210> 387
<211> 264
<212> DNA
<213> Rattus norvegicus

SO_3170 US

<223> unsure at all n locations
<400> 387

gngcggagga agccgactgt tccggatctc tgcatagcag ggcccaacct ttgctccana 60
gatcatggct gccgaggatg tgggtggcgac tggngncgac cccagcgagc tggagggcgg 120
cgggctgctt caanagatnt tcacgncgcn tctcaacctg ctgctccttg gccatgcac 180
ttctgctct acaagatcga tcgcnnggac cagcccgggtg ccaatgggga caacnactcc 240
gacgagnngn ccncgctgnc ncng 264

<210> 388
<211> 267
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 388

cggaacagtc gaggctagat tgacacagct gtccgttcag accccagcac catgcccacg 60
aactggggtt actggganat ccgtgggggt agcgcatgcc atccgcctgc tcttgggaata 120
cacagactcg agctatgagg agaagagata caccatggga gacgctcccg actttgacag 180
aagccagtgg ctgaatgaga agttcaaact gggcctggac ttccccaatc tgcctactt 240
aattgatgga tcacacaaga caccacg 267

<210> 389
<211> 307
<212> DNA
<213> Rattus norvegicus

<400> 389

gtgccctcac gcagcttaat gtggcctttt cccgggagca ggcccacaag gtctatgtcc 60
agcaccttct gaagagagac agggaacacc tgtggaagct gatccacgag ggcgggtgcc 120
acatctatgt gtgcggggat gctcgaaata tggccaaaga tgtgcaaac acattctatg 180
acattgtggc tgagttcggg cccatggagc acaccaggc tgtggactat gttaagaagc 240
tgatgaccaa gggccgctac tcactagatg tgtggagcta ggagcttacc aacctccac 300
ccctcgg 307

<210> 390

SO_3170 US

<211> 248
 <212> DNA
 <213> Rattus norvegicus

<400> 390

tcttggagaa ggcattgccc gaagtgaatt gttccttttc ttcactacca tcctccagaa 60
 ctactcagtg tccagccctg tggatectaa caccattgat atgactccca aggagagtgg 120
 attagccaaa gtagccccag tgtacaagat ttgctttgta gcccgtgat tgtgctgagg 180
 cagtcagcgg actcacttct gttcaaaatg gcccatttt tctgattctg ggagacctgc 240
 tggagacc 248

<210> 391
 <211> 283
 <212> DNA
 <213> Rattus norvegicus

<400> 391

atgggttttg accctgtcat tccctgtgga gagctggtgg cagaagtact tcagatccct 60
 tttgtaaaca cattgaggtt cagcatgggc tactccatgg agaaatactg cggccaactt 120
 ccagttccac tttcgtatgt accggttgtc aggggtgaact aacagaccat atgaccttta 180
 cagagagggg gaaaaaatatg atgctttcac tgttttttga gttttggctc cagcaatatg 240
 actttgcatt ctgggatcag ttttacagta aaactctagg aag 283

<210> 392
 <211> 290
 <212> DNA
 <213> Rattus norvegicus

<223> unsure at all n locations
 <400> 392

ggactatctc cccttaagtg ggaagggctt agtcaaagtc agtanagagc tataaaacac 60
 cgagaactct tgatgtgttg tgaaacttag agggagcagc tttttaacaa gagaactcaa 120
 gcaattgctg ccattgccggg gaagccagtc cttcactact tcgatggcag ggggagaatg 180
 gagcccatcc ggtggetcct ggctgcagct ggagtagagt ttgaagaaca atttctgaaa 240
 actcgggatg acctggccag gctaaggaat gatgggagtt tgatgttcca 290

SO_3170 US

<210> 393
 <211> 281
 <212> DNA
 <213> Rattus norvegicus

<223> unsure at all n locations
 <400> 393

ttgcactacc ctgcaaggct gtgttgcagg gcccggaagg ctactgttc cgaaatggcc 60
 gagcagtcag acaaggatgt gaagtactac actctggang gagattcaga agcacaaga 120
 cagcaagagc acctgggtga tctacatca taagtgtacg atctgaccaa gtttctcgaa 180
 gagcatcctg gtggggaaga agtcctaaga gagcaagctg ggggtgatgc tactgagaac 240
 ttgaggacgt ccgggcactc taacggatgc acgagaactg t 281

<210> 394
 <211> 287
 <212> DNA
 <213> Rattus norvegicus

<223> unsure at all n locations
 <400> 394

ccgctgctta tgccatggtc ctggaactgt acctggatct gctgtcgcag ccctgtcgcg 60
 ctatttatat cttcgccaag aagaacaata tccnttcca gatgcatact gtggagctgc 120
 gcaaggggtga gcacctcagc gatgctttgc ccagtgaacc ccatgaagaa ggtaccagcc 180
 atgaaggatg gtggcttcac cttgtgtgag agtgtggcca tctgtcteta cctggcgcac 240
 aagtataagg ttctgacca ctggtacccc caagaactgca ggcccg 287

<210> 395
 <211> 293
 <212> DNA
 <213> Rattus norvegicus

<400> 395

aagagaatcg cattaagag aaagaaaagc aaagaatgga ctttcttcag ctgatgataa 60
 actcccagaa ttccaaagtc aaagactctc ataaagcatt atccgatgtg gagattgtgg 120
 ccagtcagt tatcttcatt ttgcccgt atgagaccac tagcagtgtc ctttctttg 180
 ttttgatatt gctggccatt caccctgata tacagaagaa actgcaggat gaaattgatg 240
 cagctctccc caataaggca catgccacct atgataccct gctacaaatg gag 293

SO_3170 US

<210> 396
 <211> 266
 <212> DNA
 <213> Rattus norvegicus

<400> 396

gttggcctcc caataagtag ggtcaacatt tagtcaaaat atgcgattgt tgcaaagctt 60
 tcgaaggctg gctttgtggg tacagtgtat ccatagatgc ctgaattaac tgaagatctt 120
 aactgcagat tctacacatt tctcatcctc taatggcttc ctctggctgc ccagggctga 180
 agaaacttct tcaactgtggg gaggttgctg actctggctc tccagggcct cagcagaggg 240
 aagttggcca aagcgtgggg tccact 266

<210> 397
 <211> 259
 <212> DNA
 <213> Rattus norvegicus

<400> 397

gtcaaatggc tcccccaaaa cgatctgctt ggcatccaa aggcctgggc gttcatcaca 60
 cactccggtt cccatggtat ttatgaagga atatgcaatg gggttccaat ggtgatgatg 120
 cccttgtttg gtgatcagat ggacaacgcc aagcgcattg aaactcgggg agctgggggtg 180
 accctgaatg tcctggaaat gactgccgat gatttggaat acgcccttaa aactgtcatt 240
 aataacaaga gttacaagg 259

<210> 398
 <211> 252
 <212> DNA
 <213> Rattus norvegicus

<400> 398

gaaactttaa gaaaagtgc tactttttgc cttctcagc aggaaaacga gcttggttg 60
 gagagggcct ggcccgcatg cagttgtttc tattcttgac aaccatttta cagaacttta 120
 acctgaaatc tctggttcac ccaaaggaca ttgatacatg gccagttctg aatgggtttg 180
 cctctctgcc acccaattac cagctctgct tcattccttc ctgaatagat caggcatttt 240
 ggctctactg tg 252

<210> 399
 <211> 272
 <212> DNA
 <213> Rattus norvegicus

 <223> unsure at all n locations
 <400> 399

gngagccaat ggcncctcttc atttttcttgg ggatttggcn ttcttntttg gtttttctntt 60
 ttctatngaa tcagcaccat gtcagangga agctcccacc nggtcccact cctctaccaa 120
 tttttggcaa tattttgcaa ntgggtgtta aaaatatcag caaatctatg tgcattcnag 180
 cgaaagagta cgggcctggn tcaccatgta tctgggcatg aagcccactg tgggtgctgta 240
 tggatatgaa gtattgaaag aagctctgat tg 272

<210> 400
 <211> 294
 <212> DNA
 <213> Rattus norvegicus

 <400> 400

catccgtggg ctggctcag ccattcgct gttcctggag tatacagaca caagctatga 60
 ggacaagaag tacagcatgg gggatgctcc cgactatgac agaagccagt ggctgagtga 120
 gaagttcaaa ctgggcctgg acttccccc aa tctgccctac ttaattgatg ggtcacacaa 180
 gatcaccag agcaatgcca tcttgcgcta ccttggccgg aagcacaacc tttgtgggga 240
 gacagaggag gagaggattc gtgtggacgt tttggagaac caggctatgg acac 294

<210> 401
 <211> 276
 <212> DNA
 <213> Rattus norvegicus

 <400> 401

gctgcgagca ggtctgacct attgtctct ctgtcagag ttccccaggt ctgaagtctg 60
 cctgaaagat gtcagccctc aaagctgtct tccagtacat tgacgaaaac caggaccgct 120
 ttgtcaagaa acttgcagaa tgggtggcca tccagagcgt gtccgcgtgg ccggagaaga 180
 gaggagagat cagaaggatg acggaagcgg cagtgcagat gtccagaggc tgggggggatc 240

SO_3170 US

tgtggagctg gtggatatcg ggaagcagaa gctccc

276

<210> 402
 <211> 271
 <212> DNA
 <213> Rattus norvegicus
 <223> unsure at all n locations
 <400> 402

ctgacctgac ccatgatgta agggnccgta ggggagcatc accactgcaa aggctgacta 60
 aggnctgttn ggctaaaggt cnccttgaag ccagtggtct anagtcacac cttctttgct 120
 ctgggcccag gaggcctact tcttcttttt ctcgnggaat cctggaatct taaagataaa 180
 agaacctaga aagaaaatca aaccacttt ccttgtgggg cagatggtaa tatgggactg 240
 agaacagcaa acctgggggc ttggagagga g 271

<210> 403
 <211> 253
 <212> DNA
 <213> Rattus norvegicus
 <400> 403

cgcactgctc ctagggcaag agccttcacc tcttctacag ccaacacat gcgcgagatc 60
 gtgcacatcc aggcgggcca atgcggcaac cagatcggcg ctaaggcaac aaatatgtac 120
 ctcgggccat cctagtggac ctggagccag gcacatgga ctcagtgagg tcgggacat 180
 tcggccagat cttcaggcca gacaactttg tgttcgggtca gagggtgca ggaaataact 240
 gggcaaaggg cca 253

<210> 404
 <211> 312
 <212> DNA
 <213> Rattus norvegicus
 <400> 404

cagctggctt cctacatata gttctgtgaa agagatcaga gaggaaaga aagatggcgg 60
 gggattcaag ccgctgggct gcagtctccc ttctctctgc ctgtcagcaa agttatcttg 120
 ctttgcaagt cggacgagta agattaaaat acaagatcgc acctccagca gtcacgggct 180
 ctctggagtt tgagagaata ttctcgcac agcaaaactc tttggagttt tattccgtat 240

SO_3170 US

tcacatatac gctgtggatg gctggatggt atttcaatca agtttttgca acctgtctgg 300
gtctcctgta ca 312

<210> 405
<211> 245
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 405

ctgccggtcg ctctctgagc ctctcttggc tctgtgtctc tgtctcagc ttcacgtcc 60
tcgcccgaac gcgccatgga gggttaccat aagccagatc agcagaagct ccaggccctg 120
aaggacacag ccaatcgctt gcgcctcagc atccanncca ggcaccacc gcggcaggcg 180
nggacacccc acatctttna gtagcgcn gn cggagagcng gtcgnnctgn tattnnnnac 240
caggc 245

<210> 406
<211> 299
<212> DNA
<213> Rattus norvegicus

<400> 406

tcatacccaa gggaacagca gtactaacat cacttacatc agtgctgcat gacagtaagg 60
aattccccaa ccagagatg ttgacccag gtcactttct agatgagaat ggaaacttta 120
agaaaagtga ctacttcatg cttttctcag caggaaaacg gaaatgtgtg ggagagggcc 180
ttgccagtat ggagctgttt ttgttctga ccaccatttt acagaatttc aaactgaaat 240
ctctgtctga tccaaaggac atcgatataa actcaatacg ttctgagttt tcacatc 299

<210> 407
<211> 290
<212> DNA
<213> Rattus norvegicus

<400> 407

ggaaggggaa gaatgccagt ttttgaaaag gctactaaag gactgggcat tagtttttagc 60
cgtggaaatg tatggagagc cacaagacat ttcacagtca ataccctgag gagtttgggc 120

SO_3170 US

atgggggaaac ggaccattga gatcaaagtg caagaggaag cagagtggct agtgatggaa 180
 ctgaagaaaa ccaaaggctc accctgtgat cccaaattca tcataggatg tgctccctgc 240
 aatgtcatct gctccattat cttccagaat cgtttcgatt ataaagataa 290

<210> 408
 <211> 221
 <212> DNA
 <213> Rattus norvegicus

<223> unsure at all n locations
 <400> 408

catcagttct gtgttcaaag ttaacatcag agataatggg ctctgncnt cncntccnt 60
 ttttgntngc tngggcantg gnaaccngga agnccnntgg aganttccan aaaagaaaaa 120
 atttaggggc acaaattgtga gaaaaancnt cacaancttn gggnanannc cccctgntgc 180
 gcctnttgty gggctgccct atgtccaatc cagctatatatt g 221

<210> 409
 <211> 116
 <212> DNA
 <213> Rattus norvegicus

<223> unsure at all n locations
 <400> 409

atattgagat ggaacgattt gaagtcttgg gtgtccccctt cagtctccaa ctttgggaca 60
 ctgctgggtca ggagagggtc aagtgcacg cttccacaca acatangagn gnnatt 116

<210> 410
 <211> 275
 <212> DNA
 <213> Rattus norvegicus

<223> unsure at all n locations
 <400> 410

cacagcccct accagcncac cctccataac tgcaccaaga ggatctatcc aacacctccc 60
 tgagcaggag gagcctgaag actccaaggg aaagagtcc gaggaaccct ttctgtgca 120
 gctggatcta accacaaacc cacagggtga cacactggat gtctccttcc tctacctgga 180
 gcctgaggaa aagaaactgg tggctctgcc ttccctggg aaggaacagc gctcccctga 240
 gtgcccgggg cccgaaaagc aaagaacccc ctgat 275

<210> 411
 <211> 300
 <212> DNA
 <213> Rattus norvegicus

<223> unsure at all n locations
 <400> 411

ccctcttcaa tctcctacgc ttcctctgt ccatgcttcc catggtgncc tcatcgatcc 60
 tccaggccag tgtttctgtg gaccggtgg agaggtatct gggaggagac gatttagaca 120
 catctgccat tgcgcgcgtc agcaattttg ataaagctgt gaagttttca gaggcctctt 180
 ttacttgggc ccggacttgg aagccacaat ccaagatgtg aacctggaca taaagccagg 240
 ccaatggtgg ctgtggtggg cactgtagct ctgggaaatc ctctttggta tcagccatgt 300

<210> 412
 <211> 286
 <212> DNA
 <213> Rattus norvegicus

<223> unsure at all n locations
 <400> 412

cnagaagtta gtggagtact tgaagcagag ttcgttgatg ctgtgtttct ggatcctttt 60
 gatgtgtgtg ggctaactgg tgccaagtac tttctctccc gtcagtgggc ttcagcaggg 120
 ggatattttg tcaactatctt gaagaangct ccagtgccc cagtcctcct tcatatgtcc 180
 ccagaggtat cttgaaactc acagatacca tgactttcaa ggaaagagtg tggaacttct 240
 ttcctaattg gggagcatgc attctgtccc agtttttcaa aactgc 286

<210> 413
 <211> 272
 <212> DNA
 <213> Rattus norvegicus

<400> 413

agagaagcct gctgaggaaa cactggaaag ccttacctca ggcactaagt tgaaggaaaa 60
 acgacaatgg ccacaatggt agaactgagc cctacaagtg agcagtgtga gtttgcctca 120
 ggtctgccag tgaataagaa gacccctccc cggaaagtcc cgagtttatg ttccatgcgc 180
 tattcaatag ccttcategc acatatctgc aacttcacat tgatagcaca gaattccatc 240

ataagcatca ccatggtagc catggtcaac aa 272

<210> 414
 <211> 103
 <212> DNA
 <213> Rattus norvegicus
 <223> unsure at all n locations
 <400> 414

agctccgggg gaggtcgccc acatccttca ggntgaaagc tgcagtgttg gctgtggccc 60
 tggctcttct gacagggttg caagcttggg agttctggca gca 103

<210> 415
 <211> 273
 <212> DNA
 <213> Rattus norvegicus
 <223> unsure at all n locations
 <400> 415

aacgccctta aaactgtcat caataacaag agttacaagg agaacatcat gcgcctctcc 60
 agccttcaca aggaccgtcc tatcgagcct ctggacctgg ctgtgttctg ggtggagtac 120
 gtgatgaggc acaaggnggc gccacacctg cgcgccgcgc cccacgacct cacctggtag 180
 cagtaccact ccttggacgt gattggcttt ctctggcca tcgtgttgac ggtgggtctc 240
 attgtctata aaagttgtgc ctatggctgc cgg 273

<210> 416
 <211> 106
 <212> DNA
 <213> Rattus norvegicus
 <223> unsure at all n locations
 <400> 416

gaagannnac ctggacaccc agactgttgg aganentccg ggggatgtcg ctcacatcct 60
 tcaggatgaa anctgcagtg gtggctgnag gnnctggtct nectga 106

<210> 417
 <211> 294
 <212> DNA
 <213> Rattus norvegicus

SO_3170 US

<223> unsure at all n locations
<400> 417

cactaaagca aagcagacaa ctccagctct ccacacagct ggtctctgac accttggggg 60
acacaagggc cctagctatg gagtgcgat tccacagaca cctatgggta ccttgggatac 120
tgccaaaact cttaaataca tggactttta cctcagaaac ttgtcttcag atatcctgtt 180
aatcttcagt ttttgtttgt ttttgttttt nggaggaagg cctctctcta tgtagctatg 240
gctgtcctag aatcactctg tagatcaggc tggcctcaga ctcatgcctc tgct 294

<210> 418
<211> 262
<212> DNA
<213> Rattus norvegicus

<400> 418
cgaggcttcc aggtagcggc cggtcgcagt ctgtcccagg gtacgaccg gccttggggc 60
cagattcgcg gacccggggc tgcctcttta agggaggggg tggagccacg agtgaggatc 120
gaaaagctcc agaaaacttg aggccagagc cccgcaccag ggtgcagcca tgagtgcgga 180
ggtgaaggty acagggcaga accaggagca atttctgctc cttgccaaagt cggctaaggg 240
ggcagcactg gccacactca tc 262

<210> 419
<211> 145
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 419

acacaaaagcn atttanantg ccagactata cttgggtttaa aggaatacct tttcatgnct 60
ctgggattca aaagncaactt tnccaaaatg tnnggnaana attttgtggn cnanccccga 120
nttcatntga nccgcttanc ccagt 145

<210> 420
<211> 271
<212> DNA
<213> Rattus norvegicus

<400> 420

SO_3170 US

ctccaacctg gtgcgccacc agcggctgca caccggggaa aagccgtatg tctgcagcca 60
 gtgtggcaag gccttcatct ggagctctgt gctcatcgaa caccagcgca ttcacacagg 120
 cgagaagccc tacaagtgtg aagactgcgg caaggccttc cgaggacggg cgcatttctt 180
 ccggcactta cggacccaca cgggcgagaa gcccttctcc tgtggctcct gtggcaaagc 240
 gtttggccag agctctcagc tcatccagca c 271

<210> 421
 <211> 282
 <212> DNA
 <213> Rattus norvegicus
 <223> unsure at all n locations
 <400> 421

cagttagaag ttcttgggna ggccctgtgt agaccagcc tagctgagta ctgattcatt 60
 ttgatgtgag tgggaagaat gggggagatt cgcagctttg tcctcatcac tgttgctctg 120
 attctgggca aggagagctg ggtcctcgga gatgagaact gtttgcagga gcaggtgagg 180
 ctcagggctc aggtgcgcca gcttgagacc cgggtcaaac aacaacgggt ggtgattgca 240
 cagctcttgc acgagaagga ggtccagttc ctggatagag ga 282

<210> 422
 <211> 222
 <212> DNA
 <213> Rattus norvegicus
 <223> unsure at all n locations
 <400> 422

ctgaagacca acttgtcttc agtgagcgac tgtgtgcagc aggtggtgga gcttctgcaa 60
 gancagagca ttgttcccca caccaccatc aaaggcatcc atgaactctt tgtgccggaa 120
 aacaaaattg atcaaatecg agctgagtta gagactctcc catcactacc aattaccaag 180
 ctggatctgc agtgggtgca gattctgagc gaaggctggg cc 222

<210> 423
 <211> 275
 <212> DNA
 <213> Rattus norvegicus
 <400> 423

SO_3170 US

gagaaaggcc accacctagc taggtgaggt gtgccagcat ggtcctgggg gtctcactgt 60
 cccagccct gggacgctgg ttccgccatg caatcccttt cgctatcttc acgctgttac 120
 ttctttatat cagtgtatgg ctcttccatg agtggccctt tgagttgccca gctcaaagaa 180
 ctcagcagtc cggcctgtgg gaactcaagc tctcttctcc ttctccagcc ctcacctctc 240
 tgcttctgt cacctcaggt gttttacaag gctga 275

<210> 424
 <211> 279
 <212> DNA
 <213> Rattus norvegicus

<223> unsure at all n locations
 <400> 424

attcctcatt gcatgatgcc ttcaaataaa gggcaacgtg aatacagttt ataaatcaac 60
 gagtatttta agccttggtt aaaacatctt ttactccan nnnnnnnnnn nnnnnnnnnn 120
 nncaaactaa atcattgtag ctaacctgta atatacgtag tagttgacct ggaaaagttg 180
 taaaaatatn gctttaaccg acacgtaaat atttcagata aacattatat tctttgtata 240
 taaaanaaag aaaannangn caatggngga atnaactct 279

<210> 425
 <211> 288
 <212> DNA
 <213> Rattus norvegicus

<223> unsure at all n locations
 <400> 425

gtgttcgcag gtcccagca ctcttgccga aggactcttg tccttctcta ccagagcagc 60
 atangaggga atggctgcg tgtctccacc taccagatgt caggcatcgg tgacgtttga 120
 agatgtggct gtgaccttca cagatgacga gtggaagcgt ctggtacca tgcagagagc 180
 actctacaag accgtgatgc tggagaacta tgagagcacc atctctctgg ggcttccgt 240
 tcctcgacct gatgtgattc ttcagttcaa gagaaggggc gaatcctg 288

<210> 426
 <211> 286
 <212> DNA
 <213> Rattus norvegicus

SO_3170 US

<223> unsure at all n locations
<400> 426

gtctgggctg gagctaaagg acacacagna gcaagtccac agatccgtga tgagtccac 60
gggggcaggc ctganggccca ccatcttctg catcctgacc tgggtcagcc tgacagctgg 120
ggaccgcgta tacatccacc cctttcatct cctctactac agcaaganca nctgcgcccc 180
gctggagaac ccagtggtgg agacgctccc agagccaacc tttgagcctg tgcccattca 240
ggccaagacc tccccctggg atgagaagac cctgcgagat aagtcg 286

<210> 427
<211> 235
<212> DNA
<213> Rattus norvegicus

<400> 427
gaggattcac tcacatttgc ttcccgtctg ccatgagtga gctgcccttt ctgagtccag 60
agggagccag agggcctcac aacaacagag ggtctcagag ctccctggag gaaggctcag 120
ttacaggctc agaggctcgg cacagcttag gtgtcctgaa tgtgtccttc agcgtcagaa 180
ccgtgtcggg ccctgggtgga acatcaaata atgccagcag aagtgggaca ggaaa 235

<210> 428
<211> 249
<212> DNA
<213> Rattus norvegicus

<400> 428
ccctggttct ggaagtggag atcgtgagtc atggctgctc cccgagacgc agagatccac 60
aaggacgttc agaactacta tgggaatgta ctgaagacat ctgcagacct ccagactaat 120
gcttgtgtca cccagccaa gggggtcctt gagtacatcc ggaaaagtct gcagaatgta 180
catgaagaag ttatttccag gtattatggc tgcggtctgg tggtgctga gcattctggaa 240
aactgccgg 249

<210> 429
<211> 233
<212> DNA
<213> Rattus norvegicus

<400> 429

SO_3170 US

ctgaacttga ccaaagggag actcaggttg gaaacaaaat cccagggatg atacacggaa 60
 aaactccatt aggcacagtg acatacatgt gtaattcaaa cgctgcactt gagagactga 120
 ggcaggagga gatctatcga aaggttgaga ccaactagct gtaggctagc ctgggctatg 180
 ctgttaagac cttgtcacia agtacaagaa gggagaataa aagaatattt cct 233

<210> 430
 <211> 287
 <212> DNA
 <213> Rattus norvegicus

<223> unsure at all n locations
 <400> 430

tcaagagcat atgtgcggca cagagtggac ntgatggctt ttgttggtgt tttgttatgt 60
 gtgcacatct atgttttcat atctaccggt tgggtatgcc tttgtccctg ggtagggact 120
 ggctctctgg acaagtagat gtctgttag cctgcagaca tcacatgact ctcaagaacg 180
 aatcgtgtat cctgggtccct gctcctgtgc atgcacattc cctcctctg tcccaggga 240
 gaggcaaggg tgtgtgaggg ctatgggcag aggcocatatt gtgaaga 287

<210> 431
 <211> 183
 <212> DNA
 <213> Rattus norvegicus

<400> 431

ctaaaattaa gatagagtga atgagacaga tatctgtaga cactgtatgt tcttgtgtga 60
 tcagatctag tgtgggtggat gatagaagtt gaacttgctt tattgctatg tgttaaaata 120
 ttttgtttgc attaaatggc ctattgaaat gcttttctgt tctataata aaataacctg 180
 atg 183

<210> 432
 <211> 287
 <212> DNA
 <213> Rattus norvegicus

<223> unsure at all n locations
 <400> 432

tcaagagcat atgtgcggca cagagtggac ntgatggctt ttgttggtgt tttgttatgt 60

SO_3170 US

gtgcacatct atgttttcat atctaccggt tgggtatgcc tttgtccctg ggtagggact 120
 ggctctctgg acaagtagat gtccgtgttag cctgcagaca tcacatgact ctcaagaacg 180
 aatcgtgtat cctgggccct gctcctgtgc atgcacattc cctcctctg tcccaggga 240
 gaggaagggt tgtgtgaggt ctatgggcag agggcatatt gtgaaga 287

<210> 433
 <211> 283
 <212> DNA
 <213> Rattus norvegicus
 <223> unsure at all n locations
 <400> 433

ctgggntcan cacgttntgc tgagnannng gctgntgtgt acccccagag atccctnctg 60
 ttggaccttc accagtceng gggnggctgg gactcccaca cctcaagccc gagctatgac 120
 ttacattcca ctgctgggag aagagaggcg gggcccagag tatcctgccc ttgggagtc 180
 aagaccctag gngccaggct ggcacaggga tggggaggct ggncttttat aaatatnata 240
 tgcagannaa aagannaaaa naagggcggt cncgcacaag nna 283

<210> 434
 <211> 295
 <212> DNA
 <213> Rattus norvegicus
 <400> 434

aagatcgga gaatcacagg gctggacct gcaggacct tgtttgagg aacttcccc 60
 aacgagcgcc tttctccaga tgatgccaat tttgtggatg ctattcatac ctttaccagg 120
 gagcacatgg gtctgagtgt gggcatcaaa cagcccattg cccactatga cttctacccc 180
 aacggggggt ccttccagcc tggtgccac ttctggagc tctacaaaca cattgcagag 240
 catgggctta aatgccataa cccagaccat caaatgtgcc catgagcggt ctgtg 295

<210> 435
 <211> 133
 <212> DNA
 <213> Rattus norvegicus
 <400> 435

SO_3170 US

ccttgattct tttgctgtat agccctggat gtgtaatgca gacattatct aactgtgtgt 60
 ggtaaccttg acatcacaga actgctagtg aacgaggtaa aaataataaa ggtacaacca 120
 gtgcatcgca aaa 133

<210> 436
 <211> 212
 <212> DNA
 <213> Rattus norvegicus
 <223> unsure at all n locations
 <400> 436

accaccagtt tcgaagctgg ccggtcttgt cttaggtcga tggatgaagac aacggcatct 60
 tcaccagccg acaggaacgt gcagggagag tctggttcta gggccaactt gtgggatgct 120
 cccttgagct gggccacacg cttggtgttc ttgcagcact gtgtagcang cttctcctgc 180
 gactcggacc tgcccatccc ggcacacata gc 212

<210> 437
 <211> 291
 <212> DNA
 <213> Rattus norvegicus
 <400> 437

tttaataacg taatgacgcg gtccctttcc taatccctaa aaacctgtct cataaagtgt 60
 aatggggggag cagccctttt ggtgttgcaa aatgaagtcc caggcttcta aaatgttgcc 120
 atgtattgaa aggagctaata gccattgtaa atgttattag tttcacattt cttgagcagc 180
 ctagagtaca gggatgaacat ttgtagatct tgtaatgatg tattgtgctg tggaagtact 240
 gtgtgtgaat agcagtagtg gggcaaaaag caatcttgtc attggaatgt a 291

<210> 438
 <211> 262
 <212> DNA
 <213> Rattus norvegicus
 <400> 438

ggataaatga gacggctcgg gtccagtgca tttgcagggg actcgggttt ggttcccagc 60
 gtccacgttg ggcagcacac aagtgtccgt aactctagct ctatgggatc tgaccattt 120
 ctggcctctt cagcacctgc acaaatgtgg cagacacata tacgcttaag taaaaataat 180

SO_3170 US

taaaaaaac gaatctttaa aacattttttt aaaagaagtg atggagtga ttcctgcctt 240
atggcctgct ggaaatggaa ca 262

<210> 439
<211> 272
<212> DNA
<213> Rattus norvegicus

<400> 439
tgggcttctt tcaactgggac acttgggaca ccgctgagtt actaacagct ttgtttacac 60
agtaggaaga ggggcataga gagctgtgcc tctatggtga gcctctggga ctgaagtttg 120
ccacgactag tggttggaca cctggggaggc tggctaccta cctgtcttac tccctgaagg 180
acagggttga atctctgggt tccagtcctt agggagatgg agtactgtct gtcagctgct 240
ggctgtgctt tttgaagagg ccaaattggt tc 272

<210> 440
<211> 284
<212> DNA
<213> Rattus norvegicus

<400> 440
acagaacca acctgctact aatcacggag aagaatgtgg aggacaagaa taaggctaga 60
agccagagca agtgaggact gagcaaggga agggagaacc gattgccatc ggccttcattg 120
ctctgggttag ggtgaggttg gggccaagag gactgggcct ggcagatctt caagtcattg 180
ggaagatgga gataccactg taggggtgaa caccgggaga cctaggagat cccctcccca 240
ccctttctct tggcctccga ttcactcctg tcccggtccc tgac 284

<210> 441
<211> 233
<212> DNA
<213> Rattus norvegicus

<400> 441
ctgaacttga ccaaaggag actcaggttg gaaacaaaat cccagggatg atacacggaa 60
aaactccatt aggcacagt acatacatgt gtaattcaaa cgctgcactt gagagactga 120
ggcaggagga gatctatcga aagggtgaga ccaactagct gtaggctagc ctgggctatg 180

ctgttaagac cttgtcacaa agtacaagaa gggagaataa aagaatattt cct 233

<210> 442
 <211> 273
 <212> DNA
 <213> Rattus norvegicus
 <223> unsure at all n locations
 <400> 442

accgactgat gttccccacgg atgctaataga agctgggtgag cctccggact ttgagcagcg 60
 tccattcaga gcaagtgttt gcncttcgcc tgcaggacaa aaaacttccc cctctgctct 120
 ccgagatctg ggatgtccac gaatgactgt ttctccgtgt cctcngtggt ggcaaggcag 180
 ctgaagttac nganngcttc nnngaagngg nanannctgg ggagagaaaa nntncagggg 240
 gncgaggaaa agagacnctt ntnnnngnaan aag 273

<210> 443
 <211> 264
 <212> DNA
 <213> Rattus norvegicus
 <223> unsure at all n locations
 <400> 443

gnaagaagga aggttctctc ttcacctgct tctatttact tgccagcaca tctgttgagg 60
 tctactaacc ttgtgagatg gagcaactac tagatccttg gacttcccac tcatagctga 120
 tcattgttag ggggttgagg tacagactgt aaatcatcat aacaaactcc cttactgtat 180
 agaggctatc cataagttct gtgactctag agaaccctga ctactacaga ccctgtttca 240
 aaaaagaagc aaaagttagc tggg 264

<210> 444
 <211> 283
 <212> DNA
 <213> Rattus norvegicus
 <223> unsure at all n locations
 <400> 444

gaggaatcca attttctgag ctccacaagc cactctgcan nntcagatag tcaccagggt 60
 cactacagga ggaattgttc catctgagag acccagcatg cattatactc gctgtctgct 120

SO_3170 US

gcttctcctg gctggactct tggaactctc tcacagtcag ccagaccaag aagagcctga 180
 caatacaacc aaccaaacct acagttgttc tcacagcaga acatctccag ctaccagatt 240
 gcctctggna atgccaaactt tgccttccgc ctctaccacc tga 283

<210> 445
 <211> 290
 <212> DNA
 <213> Rattus norvegicus
 <223> unsure at all n locations
 <400> 445

gaaattcaat tttggttttc aaaattgatt cttaaganan atataccccc ataaggaaat 60
 aatatcacia tctcataagg natggggaat acagacnagg tacnttttca ggcacattca 120
 gtgtaaatat atgtagtcat ttatactgnn atattaaata atattatatt tgtgaagaca 180
 gagatttatg tcttacaatg taaatganaa acagacaaac ctaatcagat atctggctgg 240
 tgaagccatt ggtcagtgtt aggaatttcc agtcaggaga agaccctcta 290

<210> 446
 <211> 165
 <212> DNA
 <213> Rattus norvegicus
 <223> unsure at all n locations
 <400> 446

ggggaaacac attcaaagaa gaatcaggaa gagggatgtg ataggggtgct tatggatggg 60
 aaaccgagaa agganataac atttgaaatg taaatgaaaa atatccaatt aaaaaaaaaa 120
 aancaaacc tgcacagant tttgcengng ngacaaaaan agaga 165

<210> 447
 <211> 173
 <212> DNA
 <213> Rattus norvegicus
 <223> unsure at all n locations
 <400> 447

gggaggngcc ctttttccca ccaccagaag agtttgtgtt catccatgct gtacctgttg 60
 aggaacgtgt ggggactgca gtccttccca agaccataga ggagtgtgag gtgattctga 120
 tgggtgggact tcttgatct ggaaagaccc agtgggcact gaaatatgca aaa 173

<210> 448
 <211> 189
 <212> DNA
 <213> Rattus norvegicus

<400> 448

gttattaagg ataaactggt taatcaaatt aacgttgctt agttactgct gactactctt 60
 cctcagagct ggcgtgcgga aggagaagaa gctcaaggaa cattctaacc cagttaccag 120
 aactcagata gaagactaag gtgctgtgtg acgtcctgag tattagcact gtaataaaac 180
 tgtcacatg 189

<210> 449
 <211> 165
 <212> DNA
 <213> Rattus norvegicus

<223> unsure at all n locations
 <400> 449

gtatttttnc agancaganc gtgtattgaa acataaacgt atgtgccatg aaaatcacga 60
 caaaaaacta nncngatgtn ccattcaaan gtggccttct gtacatcana ggnagattct 120
 ggctttctac ggcaccagaa gntgtttcac tggcnanaan aaant 165

<210> 450
 <211> 184
 <212> DNA
 <213> Rattus norvegicus

<223> unsure at all n locations
 <400> 450

cngggggaca attaaagga ctgtgcgtac gtttctctca tgaatgaagg aagctgtctg 60
 aacaaagaat tactgattca gctacgcagc agaacatatg tgctctactc tttcaagatt 120
 aataatcttg ctttatgtca tattgtatat ttaatcttag tctgttgcn gggagggctc 180
 atgc 184

<210> 451
 <211> 271
 <212> DNA
 <213> Rattus norvegicus

SO_3170 US

<223> unsure at all n locations
<400> 451

tgcagccct cctccggggg cattctgttt ccagnccact tcgggctatg tagtctctc 60
ttctgtgctg aggcctggcc cacgtcacia gcatttcctt ccagaccac aacctccagg 120
gactgggaca aaclygggca ggatgatttg ccacttgctt ggcccgtga tcccagccc 180
atacctctcc tctctactct cccaggagac tctcaggccc agtgtgaccc tggggcttgg 240
ctgagaagct gacccagccc cagggccagc a 271

<210> 452
<211> 103
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 452

caaggagaag cagataaaga agcaaacggc tntcgtctga gctggtgaaa cancaagccc 60
aaggcccaca gaagattcag ctgaagacgg tgatgggtga tct 103

<210> 453
<211> 284
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 453

gccacagtcc cagcggancc cacagccgtt cccgccttct ccgtgtcggg cgatccccag 60
tctgtcccca aaatgcctgt ggacttcaac ggggtactgga agatgctgag caacgagaat 120
ttcgaggagt acctgcgtgc gctcgatgtc aacgtggcct tgcgaaaaat cgccaacttg 180
ctgaagccgg acaaagagat cgtgcaggat ggcgaccaca tgatcatccg cacgctgagc 240
acttttcgaa actatatcat ggacttccaa gttgggaagg agtt 284

<210> 454
<211> 277
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 454

SO_3170 US

ttctgcataa gggctttcca aattaagtct gtccagtaga gtgatttgct ttattattac 60
 caagaataca acagctagtg aaccgtagca gcatgcgaag aggggctgta actatcacca 120
 tacatgcact gtcccgtaga ggtgtgacac gggagacgtg tggatcatgt gatcattgtg 180
 aacaccttgt gagcttttaa ataaagtcca ccctgtggtg tcaaaaaana aaaaananan 240
 nannaggagn nannanncn ggattangga ccccccc 277

<210> 455
 <211> 155
 <212> DNA
 <213> Rattus norvegicus
 <223> unsure at all n locations
 <400> 455

gaatggaacc catgaggaat gccaccaaag gctgcaacga gtctgtagat gaggtccaca 60
 nggccatgta gctgccagga ctgctctgcc gtctgengtc ccaaaccaca tccccacca 120
 tccctgacac actaataaag gctttgtgac ctcaa 155

<210> 456
 <211> 277
 <212> DNA
 <213> Rattus norvegicus
 <400> 456

ggggattagc tctatctgac accttctgta tcttcattct aaagtggggt catgctttta 60
 ggggtggtgt ggcgggtgcc atggaagtgg taatgcatgt gttgatgcag ggattatgca 120
 agctgaaact tgttctcagg ggccatgtca gatgtgtgag aatacctgga ctcttggttt 180
 tctccatag taaaggggtg ttctccact ctctacaagt ctcttcatgc cagagggttt 240
 tcaagactcc catttagtgg ccaggaggat ttcattg 277

<210> 457
 <211> 277
 <212> DNA
 <213> Rattus norvegicus
 <223> unsure at all n locations
 <400> 457

cgangatctt gagactggtg tttctgtggt cactggtgga caggatgtat gtagcgtgcg 60

SO_3170 US

cgtgtgtgta agtgtgggtg tgtgtgcgtg ctctgctcat ctctagggaa ctctgaggtg 120
 ggaagtggga ggtgggaggt ggagggaccc agtagtgaga agaactagga ggtgaggcct 180
 aatgggccgc agattggtca tgttttggtg ctgatgacag agggggccagt cccaggggag 240
 gaggcttngc gggccnactt tnttgtctcc tgtcgna 277

<210> 458
 <211> 233
 <212> DNA
 <213> Rattus norvegicus

<400> 458

cctcattgaa catggctcca atgaattcac tatgttctga agacatgcaa gatttcatgc 60
 caaatatata ttcagtgcta aaaaaacaaa atcctgtggt cagtttagaa tgttttgatg 120
 tagctgagaa gctttgcca acaacaataa ctgaagctac tgtagttcat aaagttcaca 180
 tggttttata gcctttgcaa aacatatcta taaatcaatt actttttgaa aat 233

<210> 459
 <211> 294
 <212> DNA
 <213> Rattus norvegicus

<223> unsure at all n locations
 <400> 459

gttccgcgga ggcggaagct cggggtgagt ccgaactaaa ccttgcggtc aagattcggc 60
 gtcacccgta atccaccgcc ctggccgagg aaggcatagc tgctggaggt gtaatggacg 120
 tcaacactgc tctacaagag gtgctgaaga ccgcctcat ccacgatggc ctagcacgtg 180
 gcatacgcca agtgccaaag ccttagacaa gcgccaagcc catctctgcg tgcttgcatc 240
 caatgtgatg agcccatgta tgtcaagctg gtgnnggect ttttnccgaa caaa 294

<210> 460
 <211> 300
 <212> DNA
 <213> Rattus norvegicus

<223> unsure at all n locations
 <400> 460

atctggccat aatttaattc catctctagg ttttctgtct tattgtttca gaggcacatc 60

gagaaccaac catgggcagc ttactaagg aagagttgac tgccatatcc tcgatgaagg 120
 nttcactgct aaggacattc tggacaaaaa aatcaatgaa gttctcctct gatgataagg 180
 atgctttcta tgttgccgac ctccgagacg ttctaaagaa gcactcgagg tggctgaaag 240
 tcttccccgt gtactccctt ctagctgtca gtgtatgaca gcgagccata gtgagcacct 300

<210> 461
 <211> 121
 <212> DNA
 <213> Rattus norvegicus
 <223> unsure at all n locations
 <400> 461

cngctccgct cgctctcgaa cctcngtctt cagctcactg ccttcactcc agacttcacc 60
 atgtccgtca ggggtgacnca gaaatccctan aagangtcca cctcnggtcc ccgggacttc 120
 a 121

<210> 462
 <211> 133
 <212> DNA
 <213> Rattus norvegicus
 <223> unsure at all n locations
 <400> 462

cggggatccg agttgcagac nacgtgngtg cncangagcc acctcnggag ttggaaccan 60
 gaccctata actccnnnag gctgtcctca gcttgngnac agcctnagcc actccaaant 120
 tngatcaaac gtt 133

<210> 463
 <211> 281
 <212> DNA
 <213> Rattus norvegicus
 <223> unsure at all n locations
 <400> 463

cnggcggcgg acgacgttcg tcatttggtg cgggagggng cgcgagangg tgcgtcgagc 60
 ctccggtgtc ccaaactaga ggtgagcatg gcagaacagg aaccactgc tgagcagctc 120
 gctcagatag ctggagagaa tgaggaagac gagcactctg tgaactacaa gcctccagcc 180

SO_3170 US

cagaagagca tccaggagat ccaggaactg gacaaggatg atgaaagcct tcgaaagtac 240
aaggngggccc tgctggggccg agtagctgtc tctgcagacc c 281

<210> 464
<211> 264
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 464

gctccgggng cncctgcgcgc cngngnggttc tgtgncttgc nggtctgttc cctccgattg 60
tgcctancaa tgaccaccca gcagantggt ctccagggcc cgggaccncg gggtttccga 120
ntcgtgggcg gcaaggactt tgagcaacct ctgccattt cccgggtcac tcccgggagc 180
aaggntgnta tagctaactt atgcatagga gatttnatca cagccattga tggggnagat 240
accancagta tgacaaatnn gaag 264

<210> 465
<211> 277
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 465

gcttctaggg aggtctctctg caataggtgc cgggccccagc ttttttttca aaatgtctac 60
tgtccacgaa atcctgtgca acnctcagct tggaggggtga tcattctaca cccccaagtg 120
ccnatgggtc ggtcaaacc tacaccaact tcgacgntga gagggatgct ttgaacattg 180
aaacagcaat caagaccaa ggcgtggacg aggtcaccat tgtcaacatt ctgactaacc 240
gcagcaatgc acagaggcag gacattgcct tcgccta 277

<210> 466
<211> 249
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 466

tgggatcccc aggggctaata gggcatcctg ttcttgcagc aggggnactgt gagaaagtct 60
ctcaccgtga ccaagtttct ctgagtgtcc agccaacca ggctcaccag ctccctcnag 120

SO_3170 US

ctaccgcneg tccatcaggt caactgccaa ccccaggctg aanaccaaac ccagctatga 180
 gctcctggag gcatgactcc ctcagggcca gcagctccga tccctcccag tagtgatcat 240
 gggcnaggg 249

<210> 467
 <211> 253
 <212> DNA
 <213> Rattus norvegicus
 <223> unsure at all n locations
 <400> 467

tacacgcgc cgtttgtncg gcgcacatgt ccttagtgat ccccgagaag ttccagcaca 60
 tctgcgagt actccaacac caacatcgat gggcggcgga aaatagcctt cgctatcact 120
 gccattaagg ttctggccaa cggctctagac aacaagctgc gtgaggacct ggagcggtcg 180
 aagaaaatcc gagcccatag agggctgcgc cacttttggg gccttcgtgt ccgggggtcag 240
 cacaccaaga cat 253

<210> 468
 <211> 301
 <212> DNA
 <213> Rattus norvegicus
 <223> unsure at all n locations
 <400> 468

gctttctatg ttgcggacct cggagacgtt ctaaagaagc atctgaggtg gctganagta 60
 cttccccgtg ttactccctt ctatgctgtc aagtgtaatg acagcagagc catagtgage 120
 accctggctg ccattgggac aggatttgat tgtgcaagca agactgaaat acagttggtg 180
 caggggcttg gggtgccctc agagaggatt atctatgcaa atccttgtaa gcnagtgtct 240
 cagatcaagt atgctgccag taatggagtc cagatgatga cttttgacag tgaaattgag 300
 t 301

<210> 469
 <211> 136
 <212> DNA
 <213> Rattus norvegicus
 <223> unsure at all n locations

SO_3170 US

<400> 469

ttccggcgga ggccgctctt tctttttctc cgcaggggtgc gcggtggcag ccgctgcggt 60
gcttggtccc ctaagctatc cgggtgccatc cttgtcgntg cggcgacact cgcaacatct 120
gcagccatga ccgagc 136

<210> 470

<211> 147

<212> DNA

<213> Rattus norvegicus

<223> unsure at all n locations

<400> 470

attaaggaaa atggaggtct ggactcagag gaagtcttat ccnatgaag caaaaggatg 60
gatcnttgta aatacagagc tgagtatgnc tngtggctaa acgancacag ggtntgtggt 120
atccccctng caaagagtna ngccttc 147

<210> 471

<211> 294

<212> DNA

<213> Rattus norvegicus

<223> unsure at all n locations

<400> 471

gctaccagga cagctcatca tgtggggaga aatgttgggc gctgctatag gaggagtgtg 60
ggctgtncgc agctgcaccc gnccgctctg tctgcggtgg gcttcaactgg gtcaggcatt 120
ggcagctgca tcccatagcg ggncaagatg atgtctgctg cagcagttgc caacgggggc 180
ggagtcgnen caggaagcct tggtagccan actacagtcc antangtgta tttggntttn 240
tccaacatna ancaacnate catcttgggg tcttttggng naanccatna gagt 294

<210> 472

<211> 300

<212> DNA

<213> Rattus norvegicus

<223> unsure at all n locations

<400> 472

attccagcga gagacagagg gagtgagegg gcgggttggg agagcccagt gtgcagagcc 60
ccactccggg cttcctagga aggcagctct ggagtgagaa gggctttgcc tccaggcttg 120

SO_3170 US

ctgcctcctc gaccaatcc tcccgtgac ccaacatcag cggtcgcaac cctcgccgcc 180
 tctgggaaac ttgtccatt gcaacgggca gacattctc actggaactt acaatctgcg 240
 agccaggaca ggatccccag gcgcagggan ggaattttgt ctattgggac agtgttctct 300

<210> 473
 <211> 276
 <212> DNA
 <213> Rattus norvegicus

<400> 473
 gtcctcagc agtctggat tcagaatgga accatcaaag acaacatcct gtttgggtcc 60
 gaatacaatg aaaagaagta ccagcaagtt ctcaaagcat gcgctctcct ccagacttg 120
 gaaatattgc ctggaggaga catggctgag atcggagaga aggggataaa tctcagtgg 180
 ggtcagaagc agcgagtcag cctggccaga gctgcctatc aagatgctga catctatatt 240
 ctggacgac cctgtcggc tgtggatgct catgtg 276

<210> 474
 <211> 155
 <212> DNA
 <213> Rattus norvegicus
 <223> unsure at all n locations
 <400> 474

aacagctctc tgacacctga gagggatcag ccagagtaag agtcgtgggc ttgattgtaa 60
 catcagaata gcctaagagt gaagcaanca ctctgccatt acttgggant cttctgcctc 120
 ccgtgtgaga ggatgtgtcg gagaggttca ccage 155

<210> 475
 <211> 282
 <212> DNA
 <213> Rattus norvegicus
 <223> unsure at all n locations
 <400> 475

gggnccgctt ggtggcctcn attgagatnc ngaggatcna aggactgtgt anctacaatg 60
 ttgtcaagac ttttccgtat gtatggctc tttgnggtgt ctcatncnng ggaggttaatt 120
 gtgggaacgg tgacaattac tatctgtatg atgnccatga acatgttcac cggcaacaac 180

SO_3170 US

aagatctgtg gttggaatta tgagtgccca nnatttgaag angacgtgct gancagcgac 240
atcatcance tcagganaan ccggtnatcg ccatccgtac at 282

<210> 476
<211> 225
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 476

ggcggctcgg actgagcagg gctttccttg ccagtggatt gtgtagagtg tacagccagt 60
ctcttgtctt ctgtccaaca tggcatcttc tgatattcag gtgaaatgct tccggccagg 120
ctttgagtga tccagcctcg atcaaaagaa ttgtcccgag tcccccttcc cccaaagaga 180
ggncttcctg agaatcagag aatagantga agaaaganct agaca 225

<210> 477
<211> 296
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 477

aggacaccga gattgagatc tcgcacnctt cactggtaga aagggaatc aataaagccc 60
agaacttgat ngctggggaa ggggtgaaga ttagctctga tctcattagc ttggagggtta 120
gctctccaca tgtcccagac ctnactctga ttgaccttc tggtatcaca agagtggctg 180
tggggtgacca gcctgcagac atcgaacaca agatcaagan acttatcact gaatacatcc 240
agaaacagga gaccatcaac ctgggtggtgg tccccagcaa tgtggcattg ccacca 296

<210> 478
<211> 294
<212> DNA
<213> Rattus norvegicus

<223> unsure at all n locations
<400> 478

gacagcactc tgcattggctt agagagcagc tccccctctt cccactgtc agccagtgcg 60
cagttcacct ctgtgggctg cggagcacct ctgccgcagc ccagacatct tccctgagca 120

SO_3170 US

gaggcagaac aagcataggc gctttcagaa taccctagcc gtccctccgga agtctgggtt 180
 gntgggaatc actctgaaag ccaaggagtt gattcgtcag aaccaagcaa ctnaggtgna 240
 actggaccag ctgaaggagc aaaccagatg ttnatagagg ccaccaagac aggg 294

<210> 479
 <211> 281
 <212> DNA
 <213> Rattus norvegicus

<223> unsure at all n locations
 <400> 479

aaatcctgac aaaagaatct aatgttcagg aggttcgatg tccagtcact gtgtgtggag 60
 atgtgcatgg gcaatttcat gacctcatgg aactctttag aattgggtgg aaatcacaga 120
 tacaaattac ttgtttatgg gagactatgt ggacagagga tattactcag ttgaaacagt 180
 tacactgctt gtagctctta aggttcgtta ccgagagcgt atcaccatac tccganggaa 240
 tcacgagagc agacagatca cacaagttta tggtttctac g 281

<210> 480
 <211> 293
 <212> DNA
 <213> Rattus norvegicus

<223> unsure at all n locations
 <400> 480

ggcggagcag tcaactgtttg angagctctg agcncctggca gctgcacact tcagttcacc 60
 aacccaggag ctttctctct gnggaagggg tgganatagc tgtttaaaga cactgcaacc 120
 agaaaagccaa gcattctgtc actaagcagg anactgagtg cccacttgga agaagaaata 180
 aaagatgggt cttagcacag aggaaaacag gagtggtgat ttagtcaact taccagtggt 240
 cccactgccc gatggagagg ctggcgtagg ggagaacaac gggattcctt gna 293

<210> 481
 <211> 298
 <212> DNA
 <213> Rattus norvegicus

<223> unsure at all n locations
 <400> 481

ctccagctag ctcagttctc cagcctaagc ccttaaagcg tttcaaacga gctacaggga 60

SO_3170 US

agaaagggtcc ccgcacccgt caggggtctg gtgcagagtc tgaagnctg tatgactttg 120
 tttttattgt ggctggtgag aaataggatg gtgaagagat ggagattggg gaagtagctt 180
 gcgggaactc tggatngatc aatncccagc tngtttgggg gtcccnagcc anaagaggca 240
 nccccagnng attcgnaaat ttgnncacnc ctggagctgt cnacaattcc tcttcnc 298

<210> 482
 <211> 65
 <212> DNA
 <213> Rattus norvegicus
 <223> unsure at all n locations
 <400> 482

gggtgangtga agctgctaaa cccattttg gctgctgctg tggagatgct gtgctttgag 60
 agtna 65

<210> 483
 <211> 270
 <212> DNA
 <213> Rattus norvegicus
 <223> unsure at all n locations
 <400> 483

ggccggccgt gagngcgct ggagctgccg gtactggttt tggattagga atggttttct 60
 ccctcacctt ctttaagaga agaaagtggc cattagcctt tggttctggc gtgggaactgg 120
 ggatggccta ctccaactgt cagcatgact ttcaggctcc atatcttcta catggaaaat 180
 atgtcaaaga gcagtgactt atgctangaa catcccagcg ggagaaaaga gaagcctcgt 240
 ttattcctca ggaatactga agtgccctgg 270

<210> 484
 <211> 277
 <212> DNA
 <213> Rattus norvegicus
 <223> unsure at all n locations
 <400> 484

gggaagctac ctatccggta gacagctccc cctgcaccta cggtgccat gacttccgca 60
 ctgaccaag ggctggaacg aatcccagac cagcttggtt acctggtgct gagcgaaggt 120

SO_3170 US

gcagtgctag cgtcatctgg ggatcttgag aacgatgagc aggcagccag cgccatctna 180
gagctgggtca gcacagcctg tggcttcogg ctgcaccatg gcacgaacat ccttttcaag 240
cgctgtctg tggctcttgg tgaacacacg ctgctgg 277

<210> 485
<211> 279
<212> DNA
<213> Rattus norvegicus
<223> unsure at all n locations
<400> 485

caatgactca cagcgacagg gccactaagg atgctggcca gatatctggg ctaaagtgtc 60
tccgagtgat caacgagcct acagctgcag ctctggctta cggctctggac aaatccgaag 120
acaaagtcat tgctgtatat gatttaggtg gaggaacctt tgacatttct atcctggaaa 180
ttcagaaaagg agtgtttnan gtgaaatcca ccaatgggga cactttctta ggaggtgaag 240
actttgacca agctttgtta cggcacattg tcaaggagt 279

<210> 486
<211> 204
<212> DNA
<213> Rattus norvegicus
<223> unsure at all n locations
<400> 486

ggggttacnn cttgcagtcn gtccgctggt tgcaaatatt gcgtgggctc ngcgcgctgc 60
gggctgcggg anggtccgga cccggcgctc gattgcagcg ccatccagtt tgcataaac 120
tttcacctgc gctcccgga acagtttctg ctccgactcc tgatcggtca cctccctgtt 180
ttcccgacag cggggactgt cttt 204

<210> 487
<211> 290
<212> DNA
<213> Rattus norvegicus
<223> unsure at all n locations
<400> 487

gccgcccgc tggagcgtt ggnactgtcg cgtctgtgtc gctgtcgcc catcgctgc 60
cgccgctgcc acccaccagc aaccatgagc gcgcccggcc ccggtgtagt ctgctgtcct 120

SO_3170 US

ctagattagt gctctcctcc gcgacgggcc gcagcatgga gtcgcccgc gccagcccgc 180
 cggccagctt gcctcagacc aaaggaaaat ccaaaaggaa aagggattta cgaatatact 240
 gtgtgtccaa gccacccgtg tccaacccca cccccccgg aaactggact 290

<210> 488
 <211> 166
 <212> DNA
 <213> Rattus norvegicus
 <223> unsure at all n locations
 <400> 488

gacagccata catgacacca agccattggt tctgagtttt cctttgtcca gtcggcttta 60
 cgtctgtgtc caggctcggc tggtgttcca tcagctctcg tcatngggag agtcagcttc 120
 ccggaggttt tggttgatgg gcgcttgcca ggtngctggt ggggaa 166

<210> 489
 <211> 262
 <212> DNA
 <213> Rattus norvegicus
 <400> 489

gtggaagaaa gaacacagca agaattgaaa actttgcacc tggctttcag gttggagatg 60
 gaattggaat ggatttaaaa ctatccaacc acgtttttta tgcttttaaaa caacatgcct 120
 actcgggaaga acgtcgaagt gcccgctctc atgagaagaa ggaacattcc accgctgaaa 180
 aagcagttga tcttaagaca cgcttactta tgtataaaat ggtcaactct ggaatgttgg 240
 agacaatcac tggctgtatt ag 262

<210> 490
 <211> 25
 <212> DNA
 <213> Rattus norvegicus
 <400> 490

ctctcctcct cattcaacac ctctcg 25

<210> 491
 <211> 21
 <212> DNA

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<213> Rattus norvegicus

<400> 491

ctgaagcctc taaagtctac a 21

<210> 492

<211> 22

<212> DNA

<213> Rattus norvegicus

<400> 492

ctctgtctgc catccctccc ac 22

<210> 493

<211> 27

<212> DNA

<213> Rattus norvegicus

<400> 493

ctcacctcag atcctttgtg tgtctgg 27

<210> 494

<211> 25

<212> DNA

<213> Rattus norvegicus

<400> 494

tccgatcata cctagtagtt tgagc 25

<210> 495

<211> 25

<212> DNA

<213> Rattus norvegicus

<400> 495

ccttcatttg ctgctggtag tgctc 25

<210> 496

<211> 26

<212> DNA

<213> Rattus norvegicus

<400> 496

SO_3170 US

cctactgtgg atgataccag tgctgc 26

<210> 497
 <211> 25
 <212> DNA
 <213> Rattus norvegicus

<400> 497

tcgccatcct ctggcgtttt gtagg 25

<210> 498
 <211> 24
 <212> DNA
 <213> Rattus norvegicus

<400> 498

tcccttctca tgctgttggtg gctc 24

<210> 499
 <211> 27
 <212> DNA
 <213> Rattus norvegicus

<400> 499

ctctcctgct tctgatgaag taccac 27

<210> 500
 <211> 23
 <212> DNA
 <213> Rattus norvegicus

<400> 500

cctctcactg ctcttcacat ggc 23

<210> 501
 <211> 27
 <212> DNA
 <213> Rattus norvegicus

<400> 501

cactattctt gtcaaattggc taccacca 27

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